General Algebra II Lesson #1 Unit 13 Class Worksheet #1 For Worksheets #1 & #2

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

1. x ≈ _____



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

1. $\mathbf{x} \approx$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

1. x ≈ _____





Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

1. $\mathbf{x} \approx$

Given the length of one leg and the length of the hypotenuse,



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

1. $\mathbf{x} \approx$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

1. $\mathbf{x} \approx$

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

1. $\mathbf{x} \approx$

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$\mathbf{a}^2 + \mathbf{b}^2 = \mathbf{c}^2 \qquad \mathbf{a}$$

Step 1: Analyze the problem and determine the key relationship needed to solve it.

h

9

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

1. x ≈ _____



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

1. $\mathbf{x} \approx$

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem. $a^{2} + b^{2} = c^{2} \qquad a \boxed{\int_{b}^{c}} \int_{b}^{c} \int_{b}^{g} \int_{a}^{g} \int_{a}^{g} \int_{b}^{g} \int_{a}^{g} \int_{a}^{g} \int_{b}^{g} \int_{a}^{g} \int_{a}^{g} \int_{a}^{g} \int_{a}^{g} \int_{a}^{g} \int_{a}^{g} \int_{b}^{g} \int_{a}^{g} \int_{a}^{g}$

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Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

1. x ≈ _____

 $a^2 + b^2 = c^2$

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^2 + 81 = 121$$

a



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.

b

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

1. $\mathbf{x} \approx$

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

 $x^2 + 81 = 121$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

1. $\mathbf{x} \approx$

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

 $x^2 + 81 = 121$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

1. $\mathbf{x} \approx$

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^2 + 81 = 121$$

 x^2



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

1. $\mathbf{x} \approx$

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^{2} + 81 = 121$$

 $x^{2} =$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

1. $\mathbf{x} \approx$

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^{2} + 81 = 121$$

 $x^{2} = 40$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

1. $\mathbf{x} \approx$

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^{2} + 81 = 121$$

 $x^{2} = 40$
 $x =$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

1. $\mathbf{x} \approx$

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^{2} + 81 = 121$$
$$x^{2} = 40$$
$$x = \pm$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

1. $\mathbf{x} \approx$

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^{2} + 81 = 121$$
$$x^{2} = 40$$
$$x = \pm \sqrt{40}$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

1. $\mathbf{x} \approx$

X

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^{2} + 81 = 121$$
$$x^{2} = 40$$
$$x = \pm \sqrt{40}$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

1. $\mathbf{x} \approx$

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^{2} + 81 = 121$$
$$x^{2} = 40$$
$$x = \pm\sqrt{40}$$
$$x \approx 6.32$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

1. $\mathbf{x} \approx$

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^{2} + 81 = 121$$

 $x^{2} = 40$
 $x = \pm \sqrt{40}$
 $x \approx 6.32$ or



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

1. $\mathbf{x} \approx$

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^{2} + 81 = 121$$
$$x^{2} = 40$$
$$x = \pm\sqrt{40}$$
$$x \approx 6.32 \text{ or } x \approx$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

1. $\mathbf{x} \approx$

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^{2} + 81 = 121$$

 $x^{2} = 40$
 $x = \pm \sqrt{40}$
 $x \approx 6.32$ or $x \approx -6.32$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

1. $\mathbf{x} \approx$

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^{2} + 81 = 121$$

 $x^{2} = 40$
 $x = \pm \sqrt{40}$
 $x \approx 6.32$ or $x \approx -6.52$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

1. $\mathbf{x} \approx \mathbf{6.32}$

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^{2} + 81 = 121$$

 $x^{2} = 40$
 $x = \pm \sqrt{40}$
 $x \approx 6.32$ or $x \approx -6.32$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

2. x ≈ _____



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

2. x ≈ _____



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

2. x ≈ _____

Given the measure of an acute angle



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

2. x ≈ _____

Given the measure of an acute angle and the length of the hypotenuse,



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

2. x ≈ _____

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg opposite the acute angle



200

58°

Step 2: Substitute the current values in to the equation.

Step 3: Solve for x.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

2. x ≈ _____

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg opposite the acute angle using the sine ratio.



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

2. x ≈ _____

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg opposite the acute angle using the sine ratio.



sine of the acute angle = $\frac{\text{length of the opposite leg}}{\text{length of the hypotenuse}}$

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

2. x ≈ _____

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg opposite the acute angle using the sine ratio.



sine of the acute angle = $\frac{\text{length of the opposite leg}}{\text{length of the hypotenuse}}$

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.
Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

2. x ≈ _____

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg opposite the acute angle using the sine ratio.



sine of the acute angle = $\frac{\text{length of the opposite leg}}{\text{length of the hypotenuse}}$

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

2. x ≈ _____

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg opposite the acute angle using the sine ratio.







Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

2. x ≈ _____

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg opposite the acute angle using the sine ratio.

$$\sin 58^\circ = \frac{x}{-1}$$



sine of the acute angle = $\frac{\text{length of the opposite leg}}{\text{length of the hypotenuse}}$

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

2. x ≈ _____

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg opposite the acute angle using the sine ratio.

$$\sin 58^\circ = \frac{x}{200}$$



sine of the acute angle = length of the opposite leg length of the hypotenuse

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

2. x ≈ _____

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg opposite the acute angle using the sine ratio.

$$\sin 58^\circ = \frac{x}{200}$$



Step 1: Analyze the problem and determine the key relationship needed to solve it.
Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

2. x ≈ _____

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg opposite the acute angle using the sine ratio.

$$\sin 58^\circ = \frac{x}{200}$$



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

2. x ≈ _____

Χ

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg opposite the acute angle using the sine ratio.

$$\sin 58^\circ = \frac{x}{200}$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

2. x ≈ _____

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg opposite the acute angle using the sine ratio.

$$\sin 58^\circ = \frac{x}{200}$$
$$x = 200$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

2. x ≈ _____

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg opposite the acute angle using the sine ratio.

$$\sin 58^\circ = \frac{x}{200}$$
$$x = 200 \sin 58^\circ$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

2. x ≈ _____

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg opposite the acute angle using the sine ratio.

$$\sin 58^\circ = \frac{x}{200}$$
$$x = 200 \sin 58^\circ$$
$$x \approx$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

2. x ≈ _____

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg opposite the acute angle using the sine ratio.

$$\sin 58^\circ = \frac{x}{200}$$
$$x = 200 \sin 58^\circ$$
$$x \approx 169.61$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

2. x ≈ **169.61**

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg opposite the acute angle using the sine ratio.

$$\sin 58^\circ = \frac{x}{200}$$
$$x = 200 \sin 58^\circ$$
$$x \approx 169.61$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.



Step 1: Analyze the problem and determine the key relationship needed to solve it. **Step 2:** Substitute the current values in to the equation. **Step 3:** Solve for x.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

3. x ≈ _____



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

3. x ≈ _____

Given the length of each leg,



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

3. x ≈ _____

Given the length of each leg, find the length of the hypotenuse

Step 1: Analyze the problem and determine the key relationship needed to solve it.

9

4

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

3. x ≈ _____

Given the length of each leg, find the length of the hypotenuse using the Pythagorean theorem.



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

3. x ≈ _____

Given the length of each leg, find the length of the hypotenuse using the Pythagorean theorem.

$$c^2 = a^2 + b^2$$



Step 1: Analyze the problem and determine the key relationship needed to solve it.
Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

3. x ≈ _____

Given the length of each leg, find the length of the hypotenuse using the Pythagorean theorem.



x 9 4

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

3. x ≈ _____

Given the length of each leg, find the length of the hypotenuse using the Pythagorean theorem.



x 9 4

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

3. x ≈ _____

Given the length of each leg, find the length of the hypotenuse using the Pythagorean theorem.



9 4

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

3. x ≈ _____

Given the length of each leg, find the length of the hypotenuse using the Pythagorean theorem.

$$x^2 = 81$$

$$\mathbf{c}^2 = \mathbf{a}^2 + \mathbf{b}^2 \qquad \qquad \mathbf{c} \qquad \mathbf{a}$$



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Λ

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

3. x ≈ _____

Given the length of each leg, find the length of the hypotenuse using the Pythagorean theorem.

$$x^2 = 81 + 16$$

$$\mathbf{c}^2 = \mathbf{a}^2 + \mathbf{b}^2$$



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

3. x ≈ _____

Given the length of each leg, find the length of the hypotenuse using the Pythagorean theorem.

 $x^2 = 81 + 16$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

3. x ≈ _____

Given the length of each leg, find the length of the hypotenuse using the Pythagorean theorem.

 $x^2 = 81 + 16$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

3. x ≈ _____

Given the length of each leg, find the length of the hypotenuse using the Pythagorean theorem.

$$x^2 = 81 + 16$$
$$x^2$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

3. x ≈ _____

Given the length of each leg, find the length of the hypotenuse using the Pythagorean theorem.

$$x^2 = 81 + 16$$

 $x^2 =$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

3. x ≈ _____

Given the length of each leg, find the length of the hypotenuse using the Pythagorean theorem.

$$x^2 = 81 + 16$$
$$x^2 = 97$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

3. x ≈ _____

Given the length of each leg, find the length of the hypotenuse using the Pythagorean theorem.

$$x^2 = 81 + 16$$

 $x^2 = 97$

 $\mathbf{x} =$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

3. x ≈ _____

Given the length of each leg, find the length of the hypotenuse using the Pythagorean theorem.

$$x^{2} = 81 + 16$$
$$x^{2} = 97$$
$$x = \pm$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

3. x ≈ _____

Given the length of each leg, find the length of the hypotenuse using the Pythagorean theorem.

$$x^{2} = 81 + 16$$
$$x^{2} = 97$$
$$x = \pm \sqrt{97}$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

3. x ≈ _____

Given the length of each leg, find the length of the hypotenuse using the Pythagorean theorem.

$$x^{2} = 81 + 16$$
$$x^{2} = 97$$
$$x = \pm \sqrt{97}$$
$$x \approx$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

3. x ≈ _____

X

Given the length of each leg, find the length of the hypotenuse using the Pythagorean theorem.

$$x^{2} = 81 + 16$$
$$x^{2} = 97$$
$$x = \pm\sqrt{97}$$
$$\approx 9.85$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

3. x ≈ _____

X

Given the length of each leg, find the length of the hypotenuse using the Pythagorean theorem.

$$x^{2} = 81 + 16$$

 $x^{2} = 97$
 $x = \pm \sqrt{97}$
 $\approx 9.85 \text{ or}$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

3. x ≈ _____

Given the length of each leg, find the length of the hypotenuse using the Pythagorean theorem.

$$x^{2} = 81 + 16$$
$$x^{2} = 97$$
$$x = \pm \sqrt{97}$$
$$x \approx 9.85 \text{ or } x \approx$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

3. x ≈ _____

Given the length of each leg, find the length of the hypotenuse using the Pythagorean theorem.

$$x^{2} = 81 + 16$$

 $x^{2} = 97$
 $x = \pm \sqrt{97}$
 $x \approx 9.85 \text{ or } x \approx -9.85$


Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

3. x ≈ _____

Given the length of each leg, find the length of the hypotenuse using the Pythagorean theorem.

$$x^{2} = 81 + 16$$

 $x^{2} = 97$
 $x = \pm \sqrt{97}$
 $x \approx 9.85 \text{ or } x \approx -9.85$



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.Step 3: Solve for x.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.Step 3: Solve for x.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

4. x ≈ _____



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.Step 3: Solve for x.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

4. x ≈ _____



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.Step 3: Solve for x.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

4. x ≈ _____

Given the measure of an acute angle



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

4. x ≈ _____

Given the measure of an acute angle and the length of the hypotenuse,



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

4. x ≈ _____

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg adjacent the acute angle 10

Step 1: Analyze the problem and determine the key relationship needed to solve it.

35°

X

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

10

X

35°

4. x ≈ _____

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg adjacent the acute angle using the cosine ratio.

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

4. $\mathbf{x} \approx$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

4. x ≈ _____



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.Step 3: Solve for x.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

4. x ≈ _____



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

4. x ≈ _____



Step 1: Analyze the problem and determine the key relationship needed to solve it.

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Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

4. x ≈ _____

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg adjacent the acute angle using the cosine ratio. $\cos 35^\circ = \frac{x}{35^\circ}$

Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

4. $\mathbf{x} \approx$

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg adjacent the acute angle using the cosine ratio.

$$\cos 35^\circ = \frac{x}{10}$$

X

cosine of the acute angle = length of the adjacent leg length of the hypotenuse

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

10

X

35°

4. x ≈ _____

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg adjacent the acute angle using the cosine ratio.

$$\cos 35^\circ = \frac{x}{10}$$

Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.Step 3: Solve for x.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

10

X

35°

4. x ≈ _____

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg adjacent the acute angle using the cosine ratio.

$$\cos 35^\circ = \frac{x}{10}$$

Step 1: Analyze the problem and determine the key relationship needed to solve it.
Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

4. x ≈ _____

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg adjacent the acute angle using the cosine ratio.

$$\cos 35^\circ = \frac{x}{10}$$

 $\mathbf{x} =$

acent 10 35°

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

4. x ≈ _____

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg adjacent the acute angle using the cosine ratio.

$$\cos 35^\circ = \frac{x}{10}$$
$$x = 10$$

acent 10 35°

Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

4. x ≈ _____

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg adjacent the acute angle using the cosine ratio.

$$\cos 35^\circ = \frac{x}{10}$$
$$x = 10\cos 35^\circ$$

jacent 10 35° X

Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

4. x ≈ _____

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg adjacent the acute angle using the cosine ratio.





Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.Step 3: Solve for x.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

4. x ≈ _____

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg adjacent the acute angle using the cosine ratio.

$$\cos 35^\circ = \frac{x}{10}$$
$$x = 10\cos 35^\circ$$
$$x \approx 8.19$$

acent 10 35° X

Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

4. $\mathbf{x} \approx$ **8.19**

Given the measure of an acute angle and the length of the hypotenuse, find the length of the leg adjacent the acute angle using the cosine ratio.

$$\cos 35^\circ = \frac{x}{10}$$
$$x = 10\cos 35^\circ$$
$$x \approx 8.19$$

cent 10 35° X

Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

5. x ≈ _____



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.Step 3: Solve for x.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

5. x ≈ _____



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

5. x ≈ _____



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

5. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle,

Step 1: Analyze the problem and determine the key relationship needed to solve it.

X

58°

20

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

5. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the hypotenuse

Step 1: Analyze the problem and determine the key relationship needed to solve it.

58°

 $\mathbf{20}$

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

5. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the hypotenuse using the cosine ratio.

Step 1: Analyze the problem and determine the key relationship needed to solve it.

X

58°

 $\mathbf{20}$

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

5. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the hypotenuse using the cosine ratio.



Step 1: Analyze the problem and determine the key relationship needed to solve it.

X

58°

20

Step 2: Substitute the current values in to the equation.

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X

58°

20

5. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the hypotenuse using the cosine ratio.



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.Step 3: Solve for x.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

5. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the hypotenuse using the cosine ratio.



Step 1: Analyze the problem and determine the key relationship needed to solve it.

X

58°

20

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

5. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the hypotenuse using the cosine ratio.





 $cosine of the acute angle = \frac{length of the adjacent leg}{length of the hypotenuse}$

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

5. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the hypotenuse using the cosine ratio.

$$\cos 58^\circ = \frac{20}{20}$$



cosine of the acute angle = length of the adjacent leg length of the hypotenuse

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

5. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the hypotenuse using the cosine ratio.

$$\cos 58^\circ = \frac{20}{x}$$



cosine of the acute angle = length of the adjacent leg length of the hypotenuse

Step 1: Analyze the problem and determine the key relationship needed to solve it.

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Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

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Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the hypotenuse using the cosine ratio.

$$\cos 58^\circ = \frac{20}{x}$$



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

5. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the hypotenuse using the cosine ratio.

$$\cos 58^\circ = \frac{20}{x}$$



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.
Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

5. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the hypotenuse using the cosine ratio.

$$\cos 58^\circ = \frac{20}{x}$$

 $\mathbf{x} =$



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

5. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the hypotenuse using the cosine ratio.

$$\cos 58^\circ = \frac{20}{x}$$
$$x = \frac{20}{x}$$



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

5. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the hypotenuse using the cosine ratio.

$$\cos 58^\circ = \frac{20}{x}$$
$$x = \frac{20}{\cos 58^\circ}$$



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

5. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the hypotenuse using the cosine ratio.

$$\cos 58^\circ = \frac{20}{x}$$
$$x = \frac{20}{\cos 58^\circ}$$
$$x \approx$$



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

5. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the hypotenuse using the cosine ratio.

$$\cos 58^\circ = \frac{20}{x}$$
$$x = \frac{20}{\cos 58^\circ}$$
$$x \approx 37.74$$



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

5. $x \approx 37.74$

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the hypotenuse using the cosine ratio.

$$\cos 58^\circ = \frac{20}{x}$$
$$x = \frac{20}{\cos 58^\circ}$$
$$x \approx 37.74$$



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Step 3: Solve for x.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

6. x ≈ _____



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.Step 3: Solve for x.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

6. x ≈ _____



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

6. x ≈ _____

Given the measure of an acute angle



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Step 3: Solve for x.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

X

 27°

8

6. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle,

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

6. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the leg opposite the acute angle

Step 1: Analyze the problem and determine the key relationship needed to solve it.

 27°

8

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

X

 27°

8

6. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the leg opposite the acute angle using the tangent ratio.

Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

X

 27°

8

6. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the leg opposite the acute angle using the tangent ratio.

tangent of the acute angle = $\frac{\text{length of the opposite leg}}{\text{length of the adjacent leg}}$

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

X

 27°

8

6. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the leg opposite the acute angle using the tangent ratio.



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

X

 27°

8

6. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the leg opposite the acute angle using the tangent ratio.



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

6. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the leg opposite the acute angle using the tangent ratio.





X

tangent of the acute angle = $\frac{\text{length of the opposite leg}}{\text{length of the adjacent leg}}$

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

6. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the leg opposite the acute angle using the tangent ratio.

$$\tan 27^\circ = \frac{X}{27^\circ}$$

length of the opposite leg

tangent of the acute angle = $\frac{\text{length of the opposite leg}}{\text{length of the adjacent leg}}$

Step 1: Analyze the problem and determine the key relationship needed to solve it.

8

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

6. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the leg opposite the acute angle using the tangent ratio.

$$\tan 27^{\circ} = \frac{x}{8}$$

$$\tan 27^{\circ} = \frac{x}{8}$$

$$\tan 27^{\circ} = \frac{1}{8}$$

$$\tan 27^{\circ} = \frac{1}{8}$$

$$\tan 27^{\circ} = \frac{1}{8}$$

$$\tan 27^{\circ} = \frac{1}{8}$$

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

6. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the leg opposite the acute angle using the tangent ratio.

$$\tan 27^\circ = \frac{x}{8}$$

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Step 3: Solve for x.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

6. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the leg opposite the acute angle using the tangent ratio.

$$\tan 27^\circ = \frac{x}{8}$$

X

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

6. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the leg opposite the acute angle using the tangent ratio.



X

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

X

6. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the leg opposite the acute angle using the tangent ratio.



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

6. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the leg opposite the acute angle using the tangent ratio.



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

6. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the leg opposite the acute angle using the tangent ratio.



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

6. x ≈ _____

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the leg opposite the acute angle using the tangent ratio.



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

 $6. x \approx 4.08$

Given the measure of an acute angle and the length of the leg adjacent to the acute angle, find the length of the leg opposite the acute angle using the tangent ratio.



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

7. x ≈ _____



Step 1: Analyze the problem and determine the key relationship needed to solve it.

- **Step 2:** Substitute the current values in to the equation.
- **Step 3:** Solve for x.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

7. x ≈ _____

Given the measure of an acute angle



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

7. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle,



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

7. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the hypotenuse



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

7. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the hypotenuse using the sine ratio.



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

7. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the hypotenuse using the sine ratio.



sine of the acute angle = $\frac{\text{length of the opposite leg}}{\text{length of the hypotenuse}}$

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

7. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the hypotenuse using the sine ratio.



sine of the acute angle = $\frac{\text{length of the opposite leg}}{\text{length of the hypotenuse}}$

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

7. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the hypotenuse using the sine ratio.





Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

7. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the hypotenuse using the sine ratio.







Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.
Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

7. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the hypotenuse using the sine ratio.

$$\sin 28^\circ = -\frac{7}{2}$$





Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

7. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the hypotenuse using the sine ratio.

$$\sin 28^\circ = \frac{7}{x}$$





Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

7. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the hypotenuse using the sine ratio.

$$\sin 28^\circ = \frac{7}{x}$$



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

7. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the hypotenuse using the sine ratio.

$$\sin 28^\circ = \frac{7}{x}$$



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

7. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the hypotenuse using the sine ratio.

$$\sin 28^\circ = \frac{7}{x}$$

 $\mathbf{x} =$



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

7. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the hypotenuse using the sine ratio.

$$\sin 28^\circ = \frac{7}{x}$$
$$x = \frac{7}{x}$$



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

7. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the hypotenuse using the sine ratio.

$$\sin 28^\circ = \frac{7}{x}$$
$$x = \frac{7}{\sin 28^\circ}$$



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

7. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the hypotenuse using the sine ratio.

$$\sin 28^\circ = \frac{7}{x}$$
$$x = \frac{7}{\sin 28^\circ}$$
$$x \approx$$



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Step 3: Solve for x.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

7. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the hypotenuse using the sine ratio.

$$\sin 28^\circ = \frac{7}{x}$$
$$x = \frac{7}{\sin 28^\circ}$$
$$x \approx 14.91$$



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

7. $x \approx 14.91$

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the hypotenuse using the sine ratio.

$$\sin 28^\circ = \frac{7}{x}$$
$$x = \frac{7}{\sin 28^\circ}$$
$$x \approx 14.91$$



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

8. x ≈ _____



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.Step 3: Solve for x.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

8. x ≈ _____



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

8. x ≈ _____

Given the length of one leg



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

8. x ≈ _____

Given the length of one leg and the length of the hypotenuse,



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

8. x ≈ _____

Given the length of one leg and the length of the hypotenuse, find the length of the other leg



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

8. x ≈ _____

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

8. x ≈ _____

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.Step 3: Solve for x.

X

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

8. x ≈ _____

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.Step 3: Solve for x.

X

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

8. x ≈ _____

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.



Step 1: Analyze the problem and determine the key relationship needed to solve it. Step 2: Substitute the current values in to the equation.

X

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

8. x ≈ _____

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

 \mathbf{X}^2



Х

Step 2: Substitute the current values in to the equation.

a

Step 3: Solve for x.

 $a^2 + b^2 = c^2$

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

8. x ≈ _____

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

 $x^2 + 49$

$$\mathbf{a}^2 + \mathbf{b}^2 = \mathbf{c}^2 \qquad \qquad \mathbf{c} \qquad \mathbf{b}$$

Step 1: Analyze the problem and determine the key relationship needed to solve it.

X

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

8. x ≈ _____

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^2 + 49 = 144$$

$$c^2 + b^2 = c^2$$
 c b

Step 1: Analyze the problem and determine the key relationship needed to solve it.

X

Step 2: Substitute the current values in to the equation.

Step 3: Solve for x.

a

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

8. x ≈ _____

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

 $x^2 + 49 = 144$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

8. x ≈ _____

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

 $x^2 + 49 = 144$



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.Step 3: Solve for x.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

8. x ≈ _____

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^2 + 49 = 144$$

 $x^2 =$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

8. x ≈ _____

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^2 + 49 = 144$$

 $x^2 = 95$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

8. x ≈ _____

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^{2} + 49 = 144$$

 $x^{2} = 95$
 $x =$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

8. x ≈ _____

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^{2} + 49 = 144$$

 $x^{2} = 95$
 $x = \pm$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

8. x ≈ _____

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^{2} + 49 = 144$$
$$x^{2} = 95$$
$$x = \pm \sqrt{95}$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

8. x ≈ _____

Х

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^{2} + 49 = 144$$
$$x^{2} = 95$$
$$x = \pm\sqrt{95}$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

8. x ≈ _____

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^{2} + 49 = 144$$
$$x^{2} = 95$$
$$x = \pm\sqrt{95}$$
$$x \approx 9.75$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

8. x ≈ _____

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^{2} + 49 = 144$$

 $x^{2} = 95$
 $x = \pm \sqrt{95}$
 $x \approx 9.75$ or



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

8. x ≈ _____

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^{2} + 49 = 144$$
$$x^{2} = 95$$
$$x = \pm\sqrt{95}$$
$$x \approx 9.75 \text{ or } x \approx$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

8. x ≈ _____

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^{2} + 49 = 144$$

 $x^{2} = 95$
 $x = \pm \sqrt{95}$
 $x \approx 9.75$ or $x \approx -9.75$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

8. x ≈ _____

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^{2} + 49 = 144$$

 $x^{2} = 95$
 $x = \pm \sqrt{95}$
 $x \approx 9.75 \text{ or } x \approx -9.75$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

8. x ≈ **9.75**

Given the length of one leg and the length of the hypotenuse, find the length of the other leg using the Pythagorean theorem.

$$x^{2} + 49 = 144$$

 $x^{2} = 95$
 $x = \pm \sqrt{95}$
 $x \approx 9.75 \text{ or } x \approx -9.75$


Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

9. x ≈ _____



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.Step 3: Solve for x.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

9. x ≈ _____



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

9. x ≈ _____



Step 3: Solve for x.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

9. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle,



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

9. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the leg adjacent to the acute angle



8

70°

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

9. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the leg adjacent to the acute angle using the tangent ratio.



8

X

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

9. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the leg adjacent to the acute angle using the tangent ratio.

tangent of the acute angle = $\frac{\text{length of the opposite leg}}{\text{length of the adjacent leg}}$



8

70°

X

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

9. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the leg adjacent to the acute angle using the tangent ratio.

tangent of the acute angle = $\frac{\text{length of the opposite leg}}{\text{length of the adjacent leg}}$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

9. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the leg adjacent to the acute angle using the tangent ratio.

tangent of the acute angle = $\frac{\text{length of the opposite leg}}{\text{length of the adjacent leg}}$



8

70°

X

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

9. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the leg adjacent to the acute angle using the tangent ratio.

tan 70° =

tangent of the acute angle = $\frac{\text{length of the opposite leg}}{\text{length of the adjacent leg}}$



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

9. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the leg adjacent to the acute angle using the tangent ratio.

$$\tan 70^\circ = \frac{8}{2}$$

tangent of the acute angle = $\frac{\text{length of the opposite leg}}{\text{length of the adjacent leg}}$



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

9. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the leg adjacent to the acute angle using the tangent ratio.

$$\tan 70^\circ = \frac{8}{x}$$

tangent of the acute angle = length of the opposite leg length of the adjacent leg



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

9. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the leg adjacent to the acute angle using the tangent ratio.

$$\tan 70^\circ = \frac{8}{x}$$



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

9. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the leg adjacent to the acute angle using the tangent ratio.

$$\tan 70^\circ = \frac{8}{x}$$



Step 1: Analyze the problem and determine the key relationship needed to solve it.
Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

9. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the leg adjacent to the acute angle using the tangent ratio.

$$\tan 70^\circ = \frac{8}{x}$$

 $\mathbf{x} =$

A

Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

9. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the leg adjacent to the acute angle using the tangent ratio.

$$\tan 70^\circ = \frac{8}{x}$$
$$x = \frac{8}{x}$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

9. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the leg adjacent to the acute angle using the tangent ratio.

$$\tan 70^\circ = \frac{8}{x}$$
$$x = \frac{8}{\tan 70^\circ}$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

9. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the leg adjacent to the acute angle using the tangent ratio.

$$\tan 70^\circ = \frac{8}{x}$$
$$x = \frac{8}{\tan 70^\circ}$$
$$x \approx$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

9. x ≈ _____

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the leg adjacent to the acute angle using the tangent ratio.

$$\tan 70^\circ = \frac{8}{x}$$
$$x = \frac{8}{\tan 70^\circ}$$
$$x \approx 2.91$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

9. x ≈ <u>2.91</u>

Given the measure of an acute angle and the length of the leg opposite the acute angle, find the length of the leg adjacent to the acute angle using the tangent ratio.

$$\tan 70^\circ = \frac{8}{x}$$
$$x = \frac{8}{\tan 70^\circ}$$
$$x \approx 2.91$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

10. x ≈ _____



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.Step 3: Solve for x.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

10. x ≈ _____



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

10. x ≈ _____

Find the measure of an acute angle



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

10. $\mathbf{x} \approx$ _____

Find the measure of an acute angle, given the length of the hypotenuse



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

10. x ≈ _____

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg adjacent to the acute angle



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

10. x ≈ _____

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg adjacent to the acute angle using the cosine ratio.



Step 1: Analyze the problem and determine the key relationship needed to solve it.
Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

10. $\mathbf{x} \approx$ _____

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg adjacent to the acute angle using the cosine ratio.



cosine of the acute angle = $\frac{\text{length of the adjacent leg}}{\text{length of the hypotenuse}}$

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

10. x ≈ _____

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg adjacent to the acute angle using the cosine ratio.



cosine of the acute angle = $\frac{\text{length of the adjacent leg}}{\text{length of the hypotenuse}}$

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

10. x ≈ _____

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg adjacent to the acute angle using the cosine ratio.



cosine of the acute angle = $\frac{\text{length of the adjacent leg}}{\text{length of the hypotenuse}}$

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

10. x ≈ _____

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg adjacent to the acute angle using the cosine ratio.

$$\cos x^{\circ} =$$



cosine of the acute angle = <u>length of the adjacent leg</u> <u>length of the hypotenuse</u>

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

10. $\mathbf{x} \approx$ _____

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg adjacent to the acute angle using the cosine ratio.

$$\cos x^\circ = -\frac{6}{2}$$



 $cosine of the acute angle = \frac{length of the adjacent leg}{length of the hypotenuse}$

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

10. $\mathbf{x} \approx$ _____

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg adjacent to the acute angle using the cosine ratio.

$$\cos x^\circ = \frac{6}{8}$$



cosine of the acute angle = length of the adjacent leg length of the hypotenuse

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

10. $\mathbf{x} \approx$ _____

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg adjacent to the acute angle using the cosine ratio.

$$\cos x^\circ = \frac{6}{8}$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

10. $\mathbf{x} \approx$ _____

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg adjacent to the acute angle using the cosine ratio.

$$\cos x^\circ = \frac{6}{8}$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

10. $\mathbf{x} \approx$ _____

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg adjacent to the acute angle using the cosine ratio.

 $\mathbf{x} =$

$$\cos x^\circ = \frac{6}{8}$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

10. $\mathbf{x} \approx$ _____

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg adjacent to the acute angle using the cosine ratio.

$$\cos x^{\circ} = \frac{6}{8}$$
$$x = \cos^{-1}($$


Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

10. x ≈ _____

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg adjacent to the acute angle using the cosine ratio.

$$\cos x^{\circ} = \frac{6}{8}$$
$$x = \cos^{-1}(3/4)$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

10. x ≈ _____

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg adjacent to the acute angle using the cosine ratio.

$$\cos x^{\circ} = \frac{6}{8}$$
$$x = \cos^{-1}(3/4)$$
$$x \approx$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

10. x ≈ _____

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg adjacent to the acute angle using the cosine ratio.

$$\cos x^{\circ} = \frac{6}{8}$$
$$x = \cos^{-1}(3/4)$$
$$x \approx 41.41^{\circ}$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

10. $x \approx 41.41^{\circ}$

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg adjacent to the acute angle using the cosine ratio.

$$\cos x^{\circ} = \frac{6}{8}$$
$$x = \cos^{-1}(3/4)$$
$$x \approx 41.41^{\circ}$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

11. x ≈ _____



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.Step 3: Solve for x.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

11. x ≈ _____



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

11. x ≈ _____

Find the measure of an acute angle



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

11. x ≈ _____

Find the measure of an acute angle, given the length of the hypotenuse



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

11. x ≈ _____

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg opposite the acute angle

Step 1: Analyze the problem and determine the key relationship needed to solve it.

x°

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

11. x ≈ _____

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg opposite the acute angle using the sine ratio.

Step 1: Analyze the problem and determine the key relationship needed to solve it.

y°

- **Step 2:** Substitute the current values in to the equation.
- **Step 3: Solve for x.**

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

11. x ≈

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg opposite the acute angle using the sine ratio.



Step 1: Analyze the problem and determine the key relationship needed to solve it.

x°

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

11. x ≈

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg opposite the acute angle using the sine ratio.



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

11. x ≈

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg opposite the acute angle using the sine ratio.



Step 1: Analyze the problem and determine the key relationship needed to solve it.

x°

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

11. x ≈

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg opposite the acute angle using the sine ratio.

$$\sin x^{\circ} =$$



sine of the acute angle = $\frac{\text{length of the opposite leg}}{\text{length of the hypotenuse}}$

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

11. x ≈

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg opposite the acute angle using the sine ratio.

$$\sin x^\circ = \frac{2}{3}$$

site 5 2

sine of the acute angle = length of the opposite leg length of the hypotenuse

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

11. x ≈

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg opposite the acute angle using the sine ratio.

$$\sin x^\circ = \frac{2}{5}$$



sine of the acute angle = length of the opposite leg length of the hypotenuse

Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

11. x ≈ _____

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg opposite the acute angle using the sine ratio.

$$\sin x^\circ = \frac{2}{5}$$



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.Step 3: Solve for x.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

11. x ≈ _____

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg opposite the acute angle using the sine ratio.

$$\sin x^\circ = \frac{2}{5}$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

11. $\mathbf{x} \approx$ _____

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg opposite the acute angle using the sine ratio.

$$\sin x^{\circ} = \frac{2}{5}$$

 $\mathbf{x} =$

Step 1: Analyze the problem and determine the key relationship needed to solve it. Step 2: Substitute the current values in to the equation.

x°

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

11. x ≈ _____

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg opposite the acute angle using the sine ratio.

$$\sin x^{\circ} = \frac{2}{5}$$
$$x = \sin^{-1}($$

 $\frac{5}{x^{\circ}}$ 2

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

11. x ≈ _____

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg opposite the acute angle using the sine ratio.

$$\sin x^{\circ} = \frac{2}{5}$$
$$x = \sin^{-1}(2/5)$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

11. x ≈ _____

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg opposite the acute angle using the sine ratio.

$$\sin x^{\circ} = \frac{2}{5}$$
$$x = \sin^{-1}(2/5)$$
$$x \approx$$

 x°

Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

11. x ≈ _____

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg opposite the acute angle using the sine ratio.

$$\sin x^{\circ} = \frac{2}{5}$$
$$x = \sin^{-1}(2/5)$$
$$x \approx 23.58^{\circ}$$

5 X° 2

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

11. $x \approx 23.58^{\circ}$

Find the measure of an acute angle, given the length of the hypotenuse and the length of the leg opposite the acute angle using the sine ratio.

$$\sin x^{\circ} = \frac{2}{5}$$
$$x = \sin^{-1}(2/5)$$
$$x \approx 23.58^{\circ}$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

12. x ≈ _____



Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.Step 3: Solve for x.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

12. x ≈ _____



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

12. x ≈ _____

Find the measure of an acute angle



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

12. x ≈ _____

Find the measure of an acute angle, given the length of the leg opposite the acute angle



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

12. x ≈ _____

Find the measure of an acute angle, given the length of the leg opposite the acute angle and the length of the leg adjacent to the acute angle

Step 1: Analyze the problem and determine the key relationship needed to solve it.

6

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

12. x ≈ _____

Find the measure of an acute angle, given the length of the leg opposite the acute angle and the length of the leg adjacent to the acute angle using the tangent ratio.



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

12. x ≈ _____

Find the measure of an acute angle, given the length of the leg opposite the acute angle and the length of the leg adjacent to the acute angle using the tangent ratio.

tangent of the acute angle = $\frac{\text{length of the opposite leg}}{\text{length of the adjacent leg}}$

Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.Step 3: Solve for x.

6

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

12. x ≈ _____

Find the measure of an acute angle, given the length of the leg opposite the acute angle and the length of the leg adjacent to the acute angle using the tangent ratio.

tangent of the acute angle = $\frac{\text{length of the opposite leg}}{\text{length of the adjacent leg}}$

Step 1: Analyze the problem and determine the key relationship needed to solve it.Step 2: Substitute the current values in to the equation.Step 3: Solve for x.

6

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

12. x ≈ _____

Find the measure of an acute angle, given the length of the leg opposite the acute angle and the length of the leg adjacent to the acute angle using the tangent ratio.

tangent of the acute angle = $\frac{\text{length of the opposite leg}}{\text{length of the adjacent leg}}$

Step 1: Analyze the problem and determine the key relationship needed to solve it.

6

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

12. x ≈ _____

Find the measure of an acute angle, given the length of the leg opposite the acute angle and the length of the leg adjacent to the acute angle using the tangent ratio.

 $\tan x^{\circ} =$

tangent of the acute angle = length of the opposite leg length of the adjacent leg



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

12. x ≈ _____

Find the measure of an acute angle, given the length of the leg opposite the acute angle and the length of the leg adjacent to the acute angle using the tangent ratio.

$$\tan x^\circ = -\frac{6}{2}$$

tangent of the acute angle = $\frac{\text{length of the opposite leg}}{\text{length of the adjacent leg}}$



Step 1: Analyze the problem and determine the key relationship needed to solve it.

Step 2: Substitute the current values in to the equation.

Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

12. x ≈ _____

Find the measure of an acute angle, given the length of the leg opposite the acute angle and the length of the leg adjacent to the acute angle using the tangent ratio.

$$\tan x^\circ = \frac{6}{2}$$

tangent of the acute angle = length of the opposite leg length of the adjacent leg

Step 1: Analyze the problem and determine the key relationship needed to solve it.

6

xo

Step 2: Substitute the current values in to the equation.
Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

12. x ≈ _____

Find the measure of an acute angle, given the length of the leg opposite the acute angle and the length of the leg adjacent to the acute angle using the tangent ratio.

$$\tan x^\circ = \frac{6}{2}$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

12. x ≈ _____

Find the measure of an acute angle, given the length of the leg opposite the acute angle and the length of the leg adjacent to the acute angle using the tangent ratio.

$$\tan x^\circ = \frac{6}{2}$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

12. x ≈ _____

Find the measure of an acute angle, given the length of the leg opposite the acute angle and the length of the leg adjacent to the acute angle using the tangent ratio.

$$\tan x^\circ = \frac{6}{2}$$

 $\mathbf{x} =$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

12. $\mathbf{x} \approx$ _____

Find the measure of an acute angle, given the length of the leg opposite the acute angle and the length of the leg adjacent to the acute angle using the tangent ratio.

$$\tan x^{\circ} = \frac{6}{2}$$
$$x = \tan^{-1}($$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

12. x ≈ _____

Find the measure of an acute angle, given the length of the leg opposite the acute angle and the length of the leg adjacent to the acute angle using the tangent ratio.

$$\tan x^{\circ} = \frac{6}{2}$$
$$x = \tan^{-1}(3)$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

12. x ≈ _____

Find the measure of an acute angle, given the length of the leg opposite the acute angle and the length of the leg adjacent to the acute angle using the tangent ratio.

$$\tan x^{\circ} = \frac{6}{2}$$
$$x = \tan^{-1}(3)$$
$$x \approx$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

12. x ≈ _____

Find the measure of an acute angle, given the length of the leg opposite the acute angle and the length of the leg adjacent to the acute angle using the tangent ratio.

$$\tan x^{\circ} = \frac{6}{2}$$
$$x = \tan^{-1}(3)$$
$$x \approx 71.57^{\circ}$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

12. $x \approx 41.41^{\circ}$

Find the measure of an acute angle, given the length of the leg opposite the acute angle and the length of the leg adjacent to the acute angle using the tangent ratio.

$$\tan x^{\circ} = \frac{6}{2}$$
$$x = \tan^{-1}(3)$$
$$x \approx 71.57^{\circ}$$



Find the value of x in each of the following. You must show the equation you used to find x. The drawings are not to scale. Round your solutions to the nearest hundredth.

12. $x \approx 41.41^{\circ}$

Find the measure of an acute angle, given the length of the leg opposite the acute angle and the length of the leg adjacent to the acute angle using the tangent ratio.

Good luck on worksheet #1. $x = \tan^{-1}(3)$ $x \approx 71.57^{\circ}$ $x \approx 2000$

Step 1: Analyze the problem and determine the key relationship needed to solve it. Step 2: Substitute the current values in to the equation.

Step 3: Solve for x.