

# Algebra I Review Unit 13 page 1

---

Evaluate each of the following square roots. (No calculators please.)

1.  $\sqrt{64} = \underline{\hspace{2cm}}$

2.  $\sqrt{169} = \underline{\hspace{2cm}}$

3.  $\sqrt{\frac{1}{16}} = \underline{\hspace{2cm}}$

4.  $\sqrt{\frac{16}{49}} = \underline{\hspace{2cm}}$

5.  $\sqrt{0.81} = \underline{\hspace{2cm}}$

6.  $\sqrt{2.25} = \underline{\hspace{2cm}}$

Express each of the following square roots using standard radical form.

7.  $\sqrt{50} = \underline{\hspace{2cm}}$

8.  $\sqrt{72} = \underline{\hspace{2cm}}$

9.  $\sqrt{96} = \underline{\hspace{2cm}}$

10.  $\sqrt{325} = \underline{\hspace{2cm}}$

11.  $\sqrt{\frac{5}{9}} = \boxed{\hspace{2cm}}$

12.  $\sqrt{\frac{3}{8}} = \boxed{\hspace{2cm}}$

13.  $\sqrt{\frac{4}{3}} = \boxed{\hspace{2cm}}$

14.  $\sqrt{\frac{7}{18}} = \boxed{\hspace{2cm}}$

15.  $\sqrt{0.2} = \boxed{\hspace{2cm}}$

16.  $\sqrt{1.25} = \boxed{\hspace{2cm}}$

## Algebra I Review Unit 13 page 2

Solve each of the following **using the factoring method**. Show all of your work neatly organized.

17.  $x^2 + 9x - 22 = 0$

18.  $x^2 + x = 0$

19.  $16x^2 - 8x + 1 = 0$

20.  $8x^2 - 2x - 15 = 0$

Solve each of the following **using the square root property**. If any solution is irrational, then give its exact value in standard radical form. Show your work neatly organized.

21.  $x^2 - 3 = 0$

22.  $x^2 - 20 = 0$

23.  $9x^2 - 1 = 0$

24.  $5x^2 - 18 = 0$

## Algebra I Review Unit 13 page 3

Solve each of the following **using the complete the square method**. If any solution is irrational, then give its exact value in standard radical form. Show your work neatly organized.

25.  $x^2 + 2x - 4 = 0$

26.  $x^2 - 10x + 17 = 0$

27.  $2x^2 - x - 1 = 0$

28.  $3x^2 + 5x + 1 = 0$

Solve each of the following **using the quadratic formula**. If any solution is irrational, then give its exact value in standard radical form. Show your work neatly organized.

29.  $x^2 + 3x - 1 = 0$

30.  $2x^2 - x - 2 = 0$

31.  $6x^2 - 7x + 2 = 0$

32.  $5x^2 + 9x + 3 = 0$