

Algebra I Worksheet #5 Unit 1 Selected Solutions

Simplify each of the following.

$$3. \quad 5 \cdot y \cdot y \cdot y \cdot y = \underline{5y^4}$$

$$6. \quad 3 \cdot n \cdot n \cdot p \cdot p \cdot p \cdot p = \underline{3n^2p^4}$$

$$9. \quad \frac{(5x) \cdot x}{5(x \cdot x)} = \underline{5x^2}$$

$$12. \quad \frac{(5x)(2y)}{(5 \cdot x) \cdot (2 \cdot y)} = \underline{10xy}$$
$$(5 \cdot 2) \cdot (x \cdot y)$$

Find the value of each expression. If the value cannot be found, write 'not possible'.

$$15. \quad 2^4 = \underline{16}$$

$$18. \quad 10^3 = \underline{1000}$$

$$21. \quad \frac{4 \cdot 6 \cdot 25}{4 \cdot 25 \cdot 6} = \underline{600}$$
$$100 \cdot 6$$

$$25. \quad 7 \div 0 = \underline{\text{not possible}}$$

$$27. \quad 0 \cdot 9 = \underline{0}$$

$$30. \quad \frac{24}{8} = \underline{3}$$

Find the value of each expression when $x = 8$. If the value cannot be found, write 'not possible'.

$$33. \quad \frac{x - 8}{8 - 8} = \underline{0}$$

$$35. \quad \frac{5(x - 8)}{5 \cdot (8 - 8)} = \underline{0}$$
$$5 \cdot 0$$