

Spiral #7

Name:

7th Grade

Simplify.

1) $\sqrt{27}$

2) $\sqrt{300}$

3) $\sqrt{28}$

4) $\sqrt{72}$

5) $\sqrt{63}$

6) $\sqrt{44}$

7) $\sqrt{9}$

8) $\sqrt{6}$

Evaluate.

9) $3\sqrt{36} + 7$

10) $\sqrt{\frac{100}{25}} + \frac{1}{2}$

11) $\sqrt{14 + 35} - 20$

12) $2\sqrt{64} + 10$

13) $3\sqrt{16} + 1$

14) $2\sqrt{25} \sqrt{9} \sqrt{4}$

Simplify.

$$1) \frac{a^{-2}}{b^4} \cdot \frac{b^3}{ab}$$

$$2) \frac{a^6 b^{-3} c^0}{a^4 b^7 c^{-3}}$$

$$3) (a^3)^2 \cdot (a^{-1})^2$$

$$4) \frac{(c^3)^4}{b^9} \cdot \frac{1}{c^3}$$

$$5) \frac{a^5 \cdot a^{-7}}{a}$$

$$6) \frac{b^5}{b} \cdot \frac{b}{b^7}$$

$$7) (3x^4)^2$$

$$8) (2y^4)^3$$

Solve. Write answers as FRACTIONS, if necessary

$$1) 2(3x - 5) = 10$$

$$2) 3(4x + 1) = 6$$

$$3) 9(x + 2) = 0$$

$$4) 5(2x - 6) = -5$$

$$5) 28 = 4(6x + 2)$$

$$6) 7 = 6(x - 3)$$

$$7) 11 = 7(3x + 2)$$

$$8) 15 = 3(x - 4)$$

Solve. Write answers as FRACTIONS, if necessary.

$$1) 3x + 4x + 1 = 6$$

$$2) 4x - 2x - 6 = 10$$

$$3) 7x + 3 + 9x = 35$$

$$4) 6x + 1 - 5x = 18$$

$$5) x + x + x = 27$$

$$6) 4x - x + 2 = 16$$

$$7) 2x - 6x = 20$$

$$8) 3 + 6x - 8x = 15$$