

Solving Equations with Distributive Property

Date _____ Period _____

CLASS EXAMPLES: Solve each equation.

1) $3 = 3 + 3n + 5n$

2) $a + 3 - a = -2$

3) $2 + 5n - 5n = 2$

4) $19 = x - 8 + 8x$

Solve each equation.

5) $-2x + 2x = 0$

6) $-6n + n = 15$

7) $-9 = 4b - 5 - 3b$

8) $1 - 7b + 5 = -1$

9) $13 = 8n + 3 + 2$

10) $-7n + 7n = -5$

CLASS EXAMPLES: Solve each equation.

11) $-7(7p - 6) = 287$

12) $206 = 4(1 - 7n) + 6$

$$13) -115 = -4(6 + 4n) + 3n$$

$$14) 279 = 7 - 8(6a + 8)$$

Solve each equation.

$$15) 2(-6m + 7) = 98$$

$$16) 5(1 - 2v) = 85$$

$$17) 108 = 2(-8x - 2)$$

$$18) 84 = -6x - 6(x - 4)$$

$$19) -173 = -5(1 + 6m) + 6m$$

$$20) 6(2 - 5p) = 222$$

CLASS EXAMPLE: Solve each equation.

$$21) -2(2 + 4x) + 8(x + 5) = 36$$

Solve each equation.

$$22) -24 = 3(p + 1) - 6(-4 - 8p)$$

$$23) -8(5n + 6) - 7(8n + 8) = -8$$

$$24) 8(-3 + 3n) + 7(1 + 2n) = -55$$

$$25) 29 = 5(1 + 7x) + 6(2x + 4)$$

Answers to Solving Equations with Distributive Property (ID: 1)

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|------------------------------------|-----------------------------------|-----------------------------------|-------------|
| 1) $\{0\}$ | 3) $\{\text{All real numbers.}\}$ | 5) $\{\text{All real numbers.}\}$ | |
| 7) $\{-4\}$ | 9) $\{1\}$ | 11) $\{-5\}$ | 13) $\{7\}$ |
| 15) $\{-7\}$ | 17) $\{-7\}$ | 19) $\{7\}$ | |
| 21) $\{\text{All real numbers.}\}$ | 23) $\{-1\}$ | 25) $\{0\}$ | |