

Simplify the expression by combining like terms.

1) $6b - 4b + 2$

2) $8x + 7 + 4x + x + 3$

Multiply.

3) $3(7x + 6)$

Simplify the expression.

4) $-2(5y + 4) - 4$

5) $7x - 3(5 - x) + 36$

6) $3(-2x + 2) - 5(x - 3)$

Solve.

7) $x + 5 = -28 + 9$

8) $11w = 10 + 10w$

9) $5x - 4x - 8 = -8$

10) $0.4x = -40$

11) $-\frac{1}{5}r = 2$

Solve.

$$12) -6x + 7x = 5$$

$$13) 8x - 12x = 42 - 18$$

$$14) \frac{5}{6}x = 33 + 7$$

Solve the equation.

$$15) \frac{1}{4}x + 40 = 0$$

$$16) -2x - 4 = 10$$

$$17) \frac{1}{5}x + 7 = 3$$

$$18) \frac{5}{6}n = \frac{1}{6}n + \frac{2}{3}$$

$$19) 1.4x + 1.6 = -31.3 + 6.1x$$

$$20) 9x + 29 = 2x + 1$$

$$21) 6(x - 5) - (5x - 9) = 8$$

$$22) 3(y + 2) = 4(y - 7)$$

Solve.

$$23) \text{ Nine times a number, added to 5 is 23. Find the number.}$$

Solve the linear equation.

$$24) 12(5x - 4) = 5x - 4$$

$$25) \frac{x}{2} = \frac{x}{9} + \frac{9}{2}$$

$$26) \frac{x+8}{4} + \frac{x-3}{2} = \frac{5}{4}$$

$$27) 1.4x + 4.4 = 0.8x + 1.46$$

$$28) -3(x - 3) - 39 = 3x - 6(x + 2)$$

$$29) 25x + 3(x + 1) = 28(x + 1) - 25$$

Translate the sentence into a mathematical statement. Do not solve the equation.

30) If 3 times a number is added to -6 , the result is equal to 9 times the number.

Answer Key

Testname: N48 PRACTICE TEST CH7&8_FALL16

- 1) $2b + 2$
- 2) $13x + 10$
- 3) $21x + 18$
- 4) $-10y - 12$
- 5) $10x + 21$
- 6) $-11x + 21$
- 7) -24
- 8) 10
- 9) 0
- 10) -100
- 11) -10
- 12) 5
- 13) -6
- 14) 48
- 15) -160
- 16) -7
- 17) -20
- 18) 1
- 19) 7
- 20) -4
- 21) 29
- 22) 34
- 23) 2
- 24) $\left\{\frac{4}{5}\right\}$
- 25) $\left\{\frac{81}{7}\right\}$
- 26) $\{1\}$
- 27) $\{-4.9\}$
- 28) contradiction Thus, no solution
- 29) infinite solutions
- 30) $3x + (-6) = 9x$