

Review Quiz 6.1

Simplify each expression.

1) $-4(2 + 7k)$

A) $-8 - 28k$

B) $-15 - 28k$

C) $-5 - 28k$

D) $-2 - 28k$

2) $-6(2 + 6p) - 4p$

A) $-18p - 11$

B) $-36 + 3p$

C) $-2p + 2$

D) $-12 - 40p$

Solve each equation.

3) $1 + 6(-n + 4) = 25 + 5n$

A) $\{11\}$

B) $\{0\}$

C) $\{-1\}$

D) $\{-4\}$

4) $7.525m + 2.601 = 7.2(1 + 1.4m)$

A) $\{-7.7\}$

B) $\{6.1\}$

C) $\{-14.6\}$

D) $\{-1.8\}$

Find the mistake that was made when solving each equation. Explain why the work shown is incorrect. Solve each equation correctly.

5) $-(x - 2) = -5x + 22$

$-x - 2 = -5x + 22$

$4x - 2 = 22$

$4x = 24$

$x = 6$

A) $\{ \text{distributed incorrectly, } 5 \}$

B) $\{ \text{added } x \text{ to both sides incorrectly, } 4 \}$

C) $\{ \text{added a number to both sides incorrectly, } 5 \}$

D) $\{ \text{divided incorrectly, } -4 \}$

Solve each proportion.

6) $\frac{n-2}{9} = \frac{3}{4}$

A) $\{-6.35\}$

B) $\{8.75\}$

C) $\{1.4\}$

D) $\{-3\}$

Solve each equation for the indicated variable.

7) $2y - 5w = -15$, solve for w

A) $\{w = -2y + 3\}$

B) $\{w = \frac{15 + 2y}{5}\}$

C) $\{w = \frac{15 - 2y}{5}\}$

D) $\{w = -15 - 2y\}$

Solve each inequality.

8) $36 - x > -8(5x + 5) - 2$

A) $x < -18$ B) $x > -18$

C) $x < -30$ D) $x > -2$

Solve each compound inequality.

9) $42 > -3 - 5a \geq -13$

A) $-9 < a \leq 2$ B) $-1 \leq a < 4$

C) $-8 \leq a \leq 8$ D) $a \leq 2$

Write an inequality that can be used to solve each problem, and solve the inequality.

- 10) Jeanette can rent a jetski with a \$25 deposit plus an hourly fee. Jeanette paid \$46 to rent a jetski for 6 hours.

A. Write an inequality that can be used to determine how long you can rent a jetski with \$35.

B. What is the maximum number of hours that a jetski can be rented with \$35?

A) $35 > 3.5x$, 10 hours

B) $46 > 1.83x + 25$, 11 hours

C) $46 > 3.5x + 25$, 6 hours

D) $35 > 3.5x + 25$, 2 hours