

1.1-1.4 Study Guide

Date _____ Period _____

Simplify each expression.

1) $-2 - 9(b + 2)$

2) $-10(a + 11) - 6(a + 3)$

Evaluate each using the values given.

3) $y - 3(z^2 - y^2)$; use $y = -3$, and $z = -2$

Evaluate each expression.

4) $-7 - 3|-7 + 1| - 2^4$

5) $10 - 2(4 - 8)^2 - 8 \div 2(4)$

Solve each equation.

6) $-4(n + 4) = -16 - 4n$

7) $43 = -5(6a - 4) - (1 - 6a)$

8) $\frac{1}{4}x - \frac{5}{2} = -\frac{827}{80} - x - \frac{8}{5}x$

9) $\frac{3}{5}\left(-\frac{4}{3}r + 1\right) = \frac{4}{3}r - \frac{133}{45}$

10) $1.2663 + 3.821x - 5x = 2.1 + 1.6x$
(Get rid of decimals and give the exact answer.)

$$11) -7|-7x + 5| = 14$$

$$12) 2 - 9|-6 + x| = -34$$

$$13) |4y + 12| = -6y + 4$$

14) Solve the following equation for b_2 .

$$A = \frac{1}{2}h(b_1 + b_2)$$

15) Solve the following equation for y .

$$\frac{x + y}{z} - a = b$$

16) Name the sets of numbers to which each number belongs.

a) $-\frac{4}{3}$

b) $\frac{10}{2}$

c) $-\sqrt{25}$

d) -4.67

e) $\sqrt{5}$

f) 0

Answers to 1.1-1.4 Study Guide (ID: 1)

1) $-20 - 9b$

5) -38

9) $\left\{\frac{5}{3}\right\}$

13) $-\frac{4}{5}$

16) a) QR b) NWZQR c) ZQR d) QR e) IR f)WZQR

2) $-16a - 128$

6) $\{ \text{All real numbers.} \}$

10) $-\frac{3}{10}$

14) $b_2 = \frac{2A}{h} - b_1$

3) 12

7) $\{-1\}$

11) No solution.

15) $y = az + bz - x$ or $y = z(a + b) - x$

4) -41

8) $\left\{-\frac{11}{4}\right\}$

12) $\{10, 2\}$