

AVUHSD Algebra 1 Semester 2
2012-13 Study Guide 5-week Assessment

1. Which property is illustrated by:

- a. $(-3 + 7) + 5 = -3 + (7 + 5)$
- b. $(-3 + x) + 5 = 5 + (-3 + x)$
- c. $x + 0 = x$
- d. $5(-3 + x) = 5(-3) + 5(x)$

2. Simplify each of the expressions.

- a. $|3| + |4| - 5$
- b. $|-3| + |-2| - 7$
- c. $|-2| - |-5| - 3$
- d. $|-1| - |-5| + 2$

3. Evaluate each of the following.

a. $\frac{4(-3) - (-2)}{-2}$

b. $\frac{-2(5) - (4)}{7}$

c. $\frac{3(-3) - (-3)}{-3}$

d. $\frac{2(-4) - (-3)}{5}$

4. Evaluate: $-2(5 - 3) = -2(5) - 3 = 13$

- a. true
- b. false
- C. Need More Information

5. Which equation is equivalent to:

$$x + x + 2 + x + 4 = 96$$

- a. $3x = 102$
- b. $3x + 8 = 102$
- c. $3x = 90$
- d. $3x + 6 = 102$

5a. What is the best classification for $\sqrt{64}$?

- I. Real number
- II. Rational number
- III. Irrational number
- IV. Whole number

- A. I, II, and IV
- B. II only
- C. I and II
- D. III

b. What is the best classification for $-\sqrt{5}$?

- I. Real number
- II. Rational number
- III. Irrational number
- IV. Whole number

- A. I, II, and IV
- B. II only
- C. I and III
- D. III

6. Solve each of the following equations.

a. $2(x+5) - 3(3x+7) = 66$

b. $-5(x+2) + 9(3x+7) = -13$

c. $9(x+11) + 3(x-3) = 108$

d. $3(2x+3) - 7(5x-6) = -7$

7. Evaluate:

a. $(6 - 3)^2 - 4 \div 2$

b. $(-6 + 5)^2 - (-3) \div 3$

c. $(4 - 2)^2 - 10 \div (-2)$

d. $(4 - 4)^2 - 4 \div 4$

8. Which of the following can be used to compute:

$$\frac{2}{5} + \frac{3}{4}?$$

a. $\frac{2 \cdot 4}{5 \cdot 4} + \frac{3 \cdot 5}{4 \cdot 5}$

b. $\frac{2}{5 \cdot 4} + \frac{3}{4 \cdot 5}$

c. $\frac{2+3}{5+4}$

d. $\frac{2}{5 \cdot 4} + \frac{3}{4 \cdot 4}$

9. Which of the following can be used to compute:

$$\frac{3}{10} - \frac{3}{4}?$$

a. $\frac{3 \cdot 2}{10 \cdot 2} - \frac{3 \cdot 5}{4 \cdot 5}$

b. $\frac{3}{10 \cdot 2} - \frac{3}{4 \cdot 2}$

c. $\frac{3-3}{10-4}$

d. $\frac{3}{10} - \frac{3 \cdot 5}{4 \cdot 5}$

10. Solve for x.

a. $12 - x = 5$

b. $2 - x = -5$

c. $-3 - x = -3$

d. $-1 - x = 1$

11. Evaluate: $-2(5 - 3) = -2(5) - (-2)3 = -4$

a. true

b. false

C. Need More Information

12. Solve for x.

a. $\frac{x-15}{5} = -2$

b. $\frac{x+23}{4} = 12$

c. $\frac{x-25}{5} = -5$

d. $\frac{x+1}{15} = -10$

13. Which equation has no solution?

a. $2(7x - 2) = 7(2 + 7x)$

b. $2(7x - 1) = 14x - 3$

c. $14x = -14x$

d. $14x + 7 = -7(-2x - 1)$

14. Solve $3(4x - 2) = 2(6x - 3)$ for x.

a. *No solution*

b. All real numbers

c. $x = 0$

d. $x = -12$

15. Solve for x.

a. $\frac{4}{5}(10x - 3) = 12$

b. $\frac{3}{4}(8x - 3) = -5$

c. $7 = \frac{1}{3}(4x - 3)$

d. $5 = \frac{1}{7}(5x - 2)$