Algebra 1 Name_____ ID: 6

Chapter 2 Practice Test

Date_____ Period____

Translate the following into an equation.

1) v minus 8 is 48

A) $8 - v < 48$ B) $8^3 = 48$

C) $8 + v = 48$ D) $v - 8 = 48$

Translate the following equation into a verbal sentence.

2) $n - 19 = 28$

A) the sum of n and 19 is 28

B) n increased by 19 is 28

C) n decreased by 19 is 28

D) 19 squared is 28

Solve each equation.

3) $6 = 2a$

4) $9m = -99$

5) $20n = 140$

6) $2x - 5x = -3$

7) $-n - 4n = -10$

8) $\left|6 - 6n\right| = 12$

Solve each proportion.

9) $\frac{4}{p} = \frac{9}{5}$

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

Solve each equation.

11) $5m + 4m = 6 + 5m + 3m$

12) $-3(4n + 5) + 3 = -2(4n - 6)$

13) $5(v - 1) = -(1 - v)$

Solve each equation for the indicated variable.

14) $\frac{k}{a} = wv$, for a

15) $a - c = r + d$, for a

Find each percent change. State if it is an increase or a decrease.

16) From 9 to 6

17) From 19 to 14

18) Amanda wants to make a 56% alcohol solution. She has already poured 8 L of a 70% alcohol solution into a beaker. How many L of a 40% alcohol solution must she add to this to create the desired mixture?

19) 5 kg of sliced peaches which cost \$4/kg were combined with 10 kg of sliced bananas which cost \$10/kg. Find the cost per kg of the mixture.

20) Stephanie left the movie theater and drove toward the ferry office at an average speed of 30 km/h. Julio left sometime later driving in the same direction at an average speed of 45 km/h. After driving for four hours Julio caught up with Stephanie. Find the number of hours Stephanie drove before Julio caught up.

Answers to Chapter 2 Practice Test (ID: 6)

1) D
2) C
3) $\{3\}$
4) $\{-11\}$
5) $\{7\}$
6) $\{1\}$
7) $\{2\}$
8) $\{-1, 3\}$
9) $\left\{\frac{20}{9}\right\}$
10) $\left\{-\frac{2}{3}\right\}$
11) $\{6\}$
12) $\{-6\}$
13) $\{1\}$
14) $a = \frac{k}{wv}$
15) $a = c + r + d$
16) 33% decrease
17) 26% decrease
18) 7 L
19) \$8/kg
20) 6 hours