

Chapter 2 Practice Test

Date _____ Period _____

Translate the following into an equation.1) t decreased by 22 is equal to 27

A) $22 - t = 27$ B) $22 + t = 27$

C) $t \cdot 22 = 27$ D) $t - 22 = 27$

Translate the following equation into a verbal sentence.2) $x + 12 = 11$ A) 12 to the x is 11B) x to the 12th is 11C) the sum of x and 12 is 11D) the x power of 12 is 11**Solve each equation.**

3) $x + 19 = 6$

4) $-2 = p - 15$

5) $\frac{x}{4} = -11$

6) $4 - 4b - 5 = -5$

7) $-2x + 4x = -8$

8) $|-4x - 2| = 0$

Solve each proportion.

9) $-\frac{8}{2} = \frac{5}{n}$

10) $-\frac{8}{p} = \frac{4}{9}$

Solve each equation.

11) $3 + 6v = 6v + 5 + 2v$

12) $-4(r - 1) = 5r - 5(1 + 2r)$

13) $-2(4b + 4) = 4b - 4(2b + 3)$

Solve each equation for the indicated variable.

14) $m + a = n - p$, for a

15) $u = b + \frac{k}{a}$, for a

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

16) From 4.9 to 2

17) From 9 to 15

18) How much of Brand A fruit punch (50% fruit juice) must be mixed with 8 L of Brand B fruit punch (10% fruit juice) to create a mixture containing 30% fruit juice?

19) 9 kg of fruit salad was made by combining 6 kg of sliced peaches which cost \$5/kg with 3 kg of sliced bananas which cost \$2/kg. Find the cost per kg of the mixture.

20) An aircraft carrier left Diego Garcia and traveled toward St. Vincent at an average speed of 10 mph. A fishing boat left sometime later traveling in the same direction at an average speed of 25 mph. After traveling for two hours the fishing boat caught up with the aircraft carrier. How long did the aircraft carrier travel before the fishing boat caught up?

Answers to Chapter 2 Practice Test (ID: 7)

1) D

5) $\{-44\}$

9) $\left\{-\frac{5}{4}\right\}$

13) $\{1\}$

17) 67% increase

2) C

6) $\{1\}$

10) $\{-18\}$

14) $a = -m + n - p$

18) 8 L

3) $\{-13\}$

7) $\{-4\}$

11) $\{-1\}$

15) $a = \frac{k}{u - b}$

19) \$4/kg

4) $\{13\}$

8) $\left\{-\frac{1}{2}\right\}$

12) $\{-9\}$

16) 59% decrease

20) 5 hours