

Algebra & Percent Review

Name _____

Solve the equation.

1) $\frac{1}{5}x = 6$

2) $5(2z - 3) = 9(z + 4)$

3) $-7b + 2 + 5b = -3b + 7$

4) $\frac{4(y + 1)}{3} = 3y + 1$

5) $\frac{1}{2} - x + \frac{3}{2} = x - 10$

6) $\frac{1}{2}(y + 2) = 5y$

7) $-0.3(x - 9) + x = 0.5(3 - x)$

8) $8x + 5(3x - 7) = -5 - 7x$

Solve the application.

- 9) The difference of a number and 8 is the same as 36 less the number. Find the number.

Substitute the given values into the formula and solve for the unknown variable.

10) $P = 2L + 2W$; $P = 18$, $W = 6$

Write the percent as a decimal.

11) 700%

12) 0.7%

Write the decimal as a percent.

13) 0.951

14) 9.5

Write the percent as a fraction or mixed number in simplest form.

15) 3.5%

16) 0.9%

Write the fraction or mixed number as a percent.

17) $\frac{5}{11}$

18) $1\frac{3}{4}$

Solve.

19) What number is 23% of 50?

20) 0.9% of what number is 12.6?

21) 582 is what percent of 776?

24) A \$280.00 dress is on sale for 45% off. Find the discount and the sale price.

25) A sales representative is paid a commission rate of 3.3% on all sales. Find her commission if her sales were \$110,360.

26) Find the simple interest earned on \$9000 saved for $5\frac{1}{2}$ years at an interest rate of 7%.

Solve. Round all dollar amounts to the nearest cent, if necessary.

22) The bank requires the Whitcher family to make a down payment of 26% of the purchase price of their new home. If the purchase price is \$276,000, how much is their down payment?

23) If the sales tax rate is 8.3%, find the total amount charged for a television priced at \$945.

Answer Key

Testname: M050_9.5WKS_ALGEBRA_PERCENTREV

- 1) 30
- 2) 51
- 3) 5
- 4) $\frac{1}{5}$
- 5) 6
- 6) $\frac{2}{9}$
- 7) -1
- 8) 1
- 9) 22
- 10) 3
- 11) 7
- 12) 0.007
- 13) 95.1%
- 14) 950%
- 15) $\frac{7}{200}$
- 16) $\frac{9}{1000}$
- 17) $45\frac{5}{11}\%$
- 18) 175%
- 19) 11.5
- 20) 1400
- 21) 75%
- 22) \$71,760
- 23) \$1023.44
- 24) Discount: \$126.00; sale price: \$154.00
- 25) \$3641.88
- 26) \$3465.00