

Name: _____

Block: _____

Date: _____

MATH 9 - CHAPTER 8 - PRETEST

signature _____

Multiple Choice

Circle the choice that best completes the statement or answers the question.

1. Solve $0.8p = 3.6$.

- a. $p = 0.22$
- b. $p = 0.45$
- c. $p = 2.88$
- d. $p = 4.5$

$$\frac{3.6}{0.8}$$

2. What is the value of m if $\frac{3m}{5} = 3.5$?

- a. $m = 2.1$
- b. $m = 5.83$
- c. $m = 7.75$
- d. $m = 9.5$

$$\frac{3.5 \times 5}{3}$$

3. Solve $\frac{10.85}{a} = 3.5$.

- a. $a = 0.31$
- b. $a = 0.323$
- c. $a = 3.1$
- d. $a = 37.975$

$$\frac{10.85}{3.5}$$

4. What is the value of q if $2.7q - 5 = 6.07$?

- a. $q = 0.396$
- b. $q = 2.862$
- c. $q = 4.100$
- d. $q = 11.240$

$$6.07 + 5 = \underline{\quad} \div 2.7$$

5. Solve $6.4 + \frac{7d}{2.5} = 14.88$.

- a. $d = 2.8$
- b. $d = 3.0$
- c. $d = 9.2$
- d. $d = 21.28$

$$14.88 - 6.4 = \underline{\quad} \times 2.5 \div 7$$

6. Solve the following: $3(2x + 3) = 12$.

- a. $x = 0.5$
- b. $x = 1.5$
- c. $x = 2.0$
- d. $x = 3.5$

$$\begin{array}{r} 6x + 9 = 12 \\ -9 \quad -9 \\ \hline 6x = 3 \\ \frac{6x}{6} = \frac{3}{6} \\ x = \frac{1}{2} \end{array}$$

Show your work for question 7-11. You will receive a maximum of 2 marks for each question if you show correct work and circle the correct answer.

7. Solve $4x = 3 + 2x$.

- a. $x = 1.5$
- b. $x = 2$
- c. $x = 3$
- d. $x = 6$

$$\begin{array}{r} 4x = 3 + 2x \\ -2x \quad -2x \\ \hline 2x = 3 \\ \frac{2x}{2} = \frac{3}{2} \\ x = \frac{3}{2} \end{array}$$

8. Solve $2.3t = 5t - 9.99$.

- a. $t = -1.37$
- b. $t = 1.37$
- c. $t = 3.7$
- d. $t = 4.34$

$$\begin{array}{r} 2.3t = 5t - 9.99 \\ -5t \quad -5t \\ \hline -2.7t = -9.99 \\ \frac{-2.7t}{-2.7} = \frac{-9.99}{-2.7} \\ t = 3.7 \end{array}$$

9. What is $5.1d + 2.7 = 3.9d - 2.7$?

- a. $d = 0$
- b. $d = 0.675$
- c. $d = 2.25$
- d. $d = 4.5$

$$\begin{array}{r} 5.1d + 2.7 = 3.9d - 2.7 \\ -3.9d \quad -3.9d \\ \hline 1.2d + 2.7 = -2.7 \\ \frac{1.2d + 2.7}{-2.7} = \frac{-2.7}{-2.7} \\ \frac{1.2d}{1.2} = \frac{-5.4}{1.2} \\ d = 4.5 \end{array}$$

10. Brenda got a mark of 18 on her test. This mark was equal to 72%. How many marks was the test worth?

- a. 24
- b. 25
- c. 30
- d. 100

$$\frac{18}{p} = \frac{72}{100}$$

$$\frac{18(100)}{72} = \frac{72p}{72}$$

$$25 = p$$

11. Marc had 5 coupons for \$2.50 off the regular admission price of a movie. He bought tickets for himself and 4 friends. He paid \$42.25. The regular price for each ticket was

- a. \$8.45
- b. \$10.69
- c. \$10.95
- d. \$12.50

$$5(p - 2.50) = 42.25$$

$$5p - 12.50 = 42.25$$

$$+12.50 \quad +12.50$$

$$\frac{5p}{5} = \frac{54.75}{5}$$

$$p = 10.95$$

Short Answer

12. Frank used the following calculations to solve $3(2g + 2.5) = 15.9$. He has made an error. Circle the first place he made the error and find the correct answer.

$$3(2g + 2.5) = 15.9$$

$$6g + 7.5 = 15.9$$

$$6g = 23.4$$

$$g = 3.9$$

$$6g + 7.5 = 15.9$$

$$-7.5 \quad -7.5$$

$$6g = 8.4$$

$$g = 1.4$$

Problem

13. A local tour company is offering a weekend travel package special at 30% off the regular price. This is a savings of \$87.45. What is the regular price of the package?

Write an equation>>> use the variable p for price

$$\frac{30}{100} = \frac{87.45}{p}$$

Solve the equation >>>>

$$30p = 87.45 \times 100$$
$$\frac{30p}{30} = \frac{8745}{30}$$

$$p = \$291.50$$

14. Winnipeg had 161 days of precipitation. That is 1.4 times the number of days that Calgary had precipitation. How many days did Calgary have precipitation?

Write an equation>> use the variable d for days

$$161 = 1.4d$$

Solve the equation>>

$$\frac{161}{1.4} = \frac{1.4d}{1.4}$$

$$115 = d$$