

Grade 8 Summer Math Packet

Name: _____

Date: _____

1. Which of the following fractions is equivalent to $\frac{-3}{8}$? 1. _____

A. $\frac{3}{-8}$

B. $\frac{-3}{-8}$

C. $\frac{3}{8}$

D. $\frac{8}{-3}$

2. Simplify $27 - 3 + 4 \div 2 \cdot 3^2$ using the correct order of operations. 2. _____

3. Simplify: $10 - 3(5 - 2)$ 3. _____

4. Josè stood on a 4 foot high stool, then jumped into a 1 foot deep hole. Which equation applies to his action? 4. _____

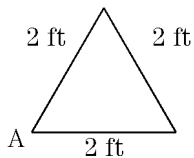
A. $5 - 4 = 1$

B. $4 - 5 = -1$

C. $4 - 1 = 3$

D. $1 - 4 = -3$

5. What is the measure of $\angle A$? 5. _____



6. The table shows the number of teams that make the playoffs in four professional sports: hockey (NHL), basketball (NBA), football (NFL), and baseball (MLB). 6. _____

Name of League	Number of Teams	Number of Playoff Teams
NHL	30	16
NBA	29	16
NFL	31	12
MLB	30	8

About what percentage of baseball teams make the playoffs?

7. Simplify: $-13 - 6$ 7. _____

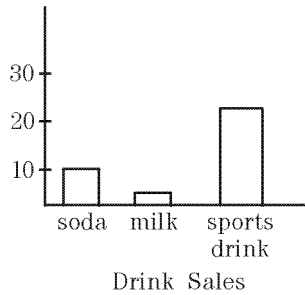
8. The sentence $3 + (5 + 2) = (5 + 2) + 3$ illustrates

8. _____

- A. the commutative property of addition
- B. the associative property of addition
- C. the distributive property of multiplication over addition
- D. the additive identity element

9. Pierre collected data and made the following graph:

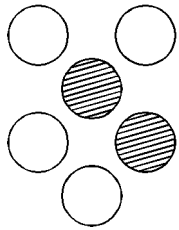
9. _____



Why might more people have chosen the sports drink?

10. In this set of chips, each plain chip has a value of -1 , and each striped chip has a value of 1 . What is the value of the set?

10. _____



11. Simplify: $\frac{-64}{-8}$

11. _____

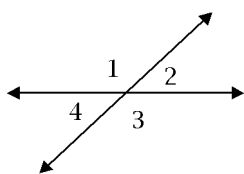
12. Which of the following is a correct proportion?

12. _____

- A. $\frac{5}{7} \stackrel{?}{=} \frac{10}{11}$
- B. $\frac{6}{9} \stackrel{?}{=} \frac{12}{27}$
- C. $\frac{4}{6} \stackrel{?}{=} \frac{8}{12}$
- D. $\frac{3}{4} \stackrel{?}{=} \frac{12}{9}$

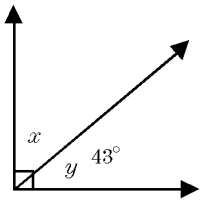
13. $\angle 1$ and $\angle 2$ are called _____.

13. _____

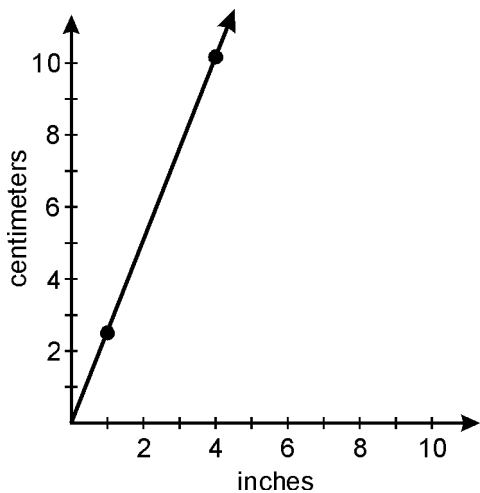


14. The coldest temperature one day was -10°F . During the day the temperature climbed 16° . What was the higher temperature? 14. _____

15. What kind of angles are angles x and y ? 15. _____



16. The graph below depicts the approximate relationship between the number of centimeters and inches. 16. _____



According to the graph, one inch is approximately how many centimeters?

17. Anita is in charge of ordering food for the snack bar at the upcoming elementary school track meet. In order to make as much money as possible, she should— 17. _____

- A. order what she likes
- B. order what she thinks people will buy
- C. order something of everything
- D. make a survey of what students are most likely to buy

18. Mrs. Keels showed the classroom how to calculate the product. 18. _____

$$3(-4) = \underline{\quad}$$

Which number completes the equation?

- A. -12
- B. -7
- C. -1
- D. 12

19. What is the additive inverse of -5 ? 19. _____

20. Which decimal is equal to $\frac{4}{5}$? 20. _____

- A. 0.08 B. 0.40 C. 0.45 D. 0.80

21. Hank owed a friend \$2.00 then paid back the \$2.00. 21. _____
Which of these describes how much Hank owes now?

- A. $-2 + 2 = 0$ B. $-2 - 2 = -4$ C. $2 + 2 = 4$ D. $0 - 2 = -2$

22. Which of the following demonstrates the Associative Property? 22. _____

- A. $2(3 - a) = 2 \cdot 3 + 2 \cdot a$ B. $-3(a \cdot b) = (-3a)b$
C. $4(a + b) = 4ab$ D. $2 + a + c = a + (c + a)$

23. The table shows the cost of four magazine subscriptions. 23. _____

Magazine	Number of Issues	Cost of Subscription
Roller's Magazine	6	\$18.00
International Traveler	8	\$32.00
Telling Now	10	\$25.00
Greatest Adventures	12	\$36.00

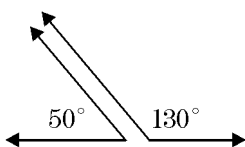
Which magazine costs the least per issue?

24. What is the decimal form of $\frac{25}{100}$? 24. _____

25. Simplify: $-128 - (-46)$ 25. _____

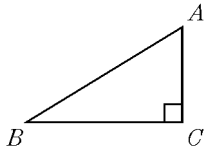
26. Dividing a positive number by a number greater than one results in a— 26. _____

27. The angles shown are best classified as _____. 27. _____



28. In right triangle ABC , $m\angle A = 37^\circ$. Find the measure of $\angle B$.

28. _____



29. Josephina works a 40-hour week and earns \$810. Which equation represents the situation if H is the amount she earns *per hour*?

29. _____

- A. $40 + H = 810$ B. $H - 40 = 810$ C. $40H = 810$ D. $\frac{H}{40} = 810$

30. What are two numbers that have a ratio equal to $\frac{10}{15}$?

30. _____