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6th Grade Student Winter Packet

Find the greatest common factor of each set of numbers.

1. 27, 36, 72
   a. 216   b. 8
   c. 9     d. 18

2. The table shows the record low temperatures of four different towns. Which of the following shows the record temperatures ordered from least to greatest?

<table>
<thead>
<tr>
<th>Town</th>
<th>Temperature (°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oakmont</td>
<td>-7</td>
</tr>
<tr>
<td>Cherry Grove</td>
<td>3</td>
</tr>
<tr>
<td>Anderson Hills</td>
<td>11</td>
</tr>
<tr>
<td>Glentown</td>
<td>-2</td>
</tr>
</tbody>
</table>

   a. -2, 3, -7, 11   b. -2, -7, 3, 11
   c. 11, 3, -2, -7   d. -7, -2, 3, 11

3. A grocery store has 48 cartons of eggs. If there are 12 eggs in each carton, how many eggs are there?
   a. 476 eggs     b. 4 eggs
   c. 576 eggs     d. 60 eggs

4. There are 25 servings in a 30.2-ounce jar of peanut butter. How many ounces of peanut butter are there in 1 serving?
   a. 0.64 ounce   b. 1.15 ounces
   c. 0.828 ounce  d. 1.208 ounces

   Use the draw a diagram strategy.

5. Joshua spent $\frac{3}{7}$ of his money on souvenirs on vacation. He has $16 left. How much money did he spend on souvenirs?
   a. $28
   b. $16
   c. $12
   d. $15

6. Jennifer has $\frac{4}{5}$ as many pictures on her camera as Luisa does. Jennifer has 28 pictures on her camera. How many pictures do Jennifer and Luisa have in all?
   a. 63
   b. 60
   c. 70
   d. 35
Find the least common multiple of each set of numbers.

7. 4, 10, 12
   a. 12  b. 120
c. 2     d. 60

8. Factor $54a + 24b$.
   a. $6(54a + 24b)$
b. $6ab(9 + 4)$
c. $6(9a + 4b)$
d. $78ab$

9. Which of the following expressions is equivalent to $6(5 + 3x)$?
   a. $30 + 18x$  b. $11 + 9x$
c. $11 + 3x$     d. $30 + 3x$

10. The expression $\frac{d}{t}$ can be used to find the average speed of an object that travels a distance $d$ in time $t$. What is a car’s average speed if it travels 145 miles in 2.5 hours?
    a. 62 miles per hour  b. 65 miles per hour
c. 58 miles per hour     d. 362.5 miles per hour

11. Caleb’s receipt for lunch is shown below. If Caleb pays with a $10 bill, how much change will he receive?

<table>
<thead>
<tr>
<th>Donna’s Deli</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicken Sandwich</td>
<td>$3.79</td>
</tr>
<tr>
<td>Soup</td>
<td>$1.45</td>
</tr>
<tr>
<td>Drink</td>
<td>$1.29</td>
</tr>
<tr>
<td>Tax</td>
<td>$0.39</td>
</tr>
</tbody>
</table>

a. $6.92  b. $5.74
c. $3.18  d. $3.08
12. Which number line shows two different integers with the same absolute value?
   a. 
   b. 
   c. 
   d. 

13. Colleen rode her bicycle 9.5 miles in 0.8 hour. What was her average speed in miles per hour?
   a. 8.7 miles per hour   b. 10.3 miles per hour
   c. 7.6 miles per hour   d. 11.875 miles per hour

14. Which of the following rational numbers represents a repeating decimal?
   a. \( \frac{11}{40} \)   b. \( \frac{3}{25} \)
   c. \( \frac{25}{48} \)   d. \( \frac{7}{32} \)

15. Use the Distributive Property to rewrite \( 9(10 + x) \).
   a. \( 19 + 9x \)
   b. \( 90 + 9x \)
   c. \( 90 + x \)
   d. \( 10 + 9x \)
16. The top students in a distance throwing competition are shown in the table. How many yards did the winner of the competition throw the ball?

<table>
<thead>
<tr>
<th>Student</th>
<th>Distance (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ashley</td>
<td>162</td>
</tr>
<tr>
<td>Craig</td>
<td>156</td>
</tr>
<tr>
<td>Fernando</td>
<td>175</td>
</tr>
<tr>
<td>Robert</td>
<td>166</td>
</tr>
</tbody>
</table>

a. $58 \frac{1}{3}$ yards  
b. 52 yards  
c. 468 yards  
d. 525 yards

17. Which property is represented by the equation below?

$$\frac{2}{3} \times \frac{3}{2} = 1$$

a. Commutative Property of Multiplication  
b. Distributive Property  
c. Multiplicative Identity Property  
d. Multiplicative Inverse Property

18. In a machine, a large gear completes a revolution every minute while a small gear completes a revolution every 24 seconds. If the gears are currently aligned, how much time will pass before they are aligned again?

a. 1 minute  
b. 2 minutes  
c. 24 seconds  
d. 12 seconds
19. Which of the following coordinate planes correctly shows point G(4, -5) graphed?

a. 

b. 

c. 

d. 

20. Tommy can ride his bicycle 4.5 miles in 15 minutes. How many miles can he ride in 75 minutes?

Use the ratio tables given to solve each problem.

<table>
<thead>
<tr>
<th>Number of Miles</th>
<th>4.5</th>
<th>?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time (min)</td>
<td>15</td>
<td>75</td>
</tr>
</tbody>
</table>

a. 13.5  b. 9  
c. 27  d. 22.5

21. Alex runs on the track at school each weekday morning. If he runs 5.9 miles each day, about how much does he run every month?

a. 180 miles  
b. 30 miles  
c. 42 miles  
d. 120 miles
Write each ratio as a fraction in simplest form.

22. 10 sweaters to 8 shirts
   a. \( \frac{2}{5} \)
   b. \( \frac{5}{4} \)
   c. \( \frac{5}{2} \)
   d. \( \frac{4}{5} \)

Find each sum.

23. 27.58 + 40.5
   a. 67.08
   b. 68.18
   c. 68.08
   d. 12.92

24. Regina purchased 1.75 pounds of turkey breast from her local deli for $5.99 per pound. To the nearest cent, how much did she spend in all?
   a. $7.74
   b. $3.42
   c. $10.48
   d. $11.98

25. Which of the following integers has the greatest absolute value?
   a. –10
   b. 7
   c. 1
   d. 0

26. The Panthers football team lost 4 yards on each of their first two plays of the game. Which of the following integers represents the progress of the team after the first two plays?
   a. 4
   b. –8
   c. –4
   d. 8

27. Evaluate the expression if \( a = 2.4 \), \( b = 0.237 \), and \( c = 9.49 \).
   \[ c - 2ab \]
   a. 8.3524
   b. –2.24913
   c. 0.899652
   d. 4.260312

28. Which of the following expressions correctly uses exponents to show the prime factorization of 360?
   a. \( 2^4 \times 3 \times 5 \)
   b. \( 2^3 \times 3^2 \times 5 \)
   c. \( 2^3 \times 3^2 \times 5 \)
   d. \( 2^4 \times 3^2 \times 5 \)
Divide. Write in simplest form.

29. \( 10 \div 1 \frac{2}{3} \)
   a. \( 11 \frac{2}{3} \)
   b. \( 6 \)
   c. \( 16 \frac{2}{3} \)
   d. \( \frac{1}{6} \)

30. Ellie has 4 quarters for every 5 pennies in her change purse. How many pennies would she have if she has 16 quarters?
   a. 24  
   b. 25  
   c. 17  
   d. 20

31. The table shows the number of inches of snow that fell per hour.

<table>
<thead>
<tr>
<th>Snowfall per Hour</th>
<th>Number of Hours, ( x )</th>
<th>Number of Inches of Snow, ( y )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>

List the information from the table as ordered pairs.

   a. (2, 1), (4, 2), (6, 3)  
   b. (1, 2), (2, 4), (3, 6)  
   c. (1, 4), (2, 4), (3, 6)  
   d. (1, 2), (2, 6), (3, 4)

32. There are 30 students in Mr. Holland’s music class. If 30% of the students play in the school band, how many students in the class play in the school band?
   a. 15 students  
   b. 100 students  
   c. 9 students  
   d. 12 students
33. The table below shows the number of pennies, nickels, dimes, and quarters that Heather has in her purse. What is the ratio of dimes to nickels expressed as a fraction in simplest form?

<table>
<thead>
<tr>
<th>Heather's Coins</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimes</td>
<td>9</td>
</tr>
<tr>
<td>Nickels</td>
<td>6</td>
</tr>
<tr>
<td>Pennies</td>
<td>8</td>
</tr>
<tr>
<td>Quarters</td>
<td>4</td>
</tr>
</tbody>
</table>

a. $\frac{2}{3}$    b. $\frac{3}{5}$

c. $\frac{3}{2}$    d. $\frac{2}{5}$

34. Trish runs 3 miles every 50 minutes. At this rate, how many minutes did Trish run if she ran 12 miles?

a. 50    b. 250

c. 100    d. 200

35. Convert 5 quarts into pints.

a. 7 pints
b. 5 pints
c. 10 pints
d. 15 pints
Non-Discrimination Policy

The School Board of Miami-Dade County, Florida adheres to a policy of nondiscrimination in employment and educational programs/activities and strives affirmatively to provide equal opportunity for all as required by:

Title VI of the Civil Rights Act of 1964 - prohibits discrimination on the basis of race, color, religion, or national origin.

Title VII of the Civil Rights Act of 1964 as amended - prohibits discrimination in employment on the basis of race, color, religion, gender, or national origin.

Title IX of the Education Amendments of 1972 - prohibits discrimination on the basis of gender.

Age Discrimination in Employment Act of 1967 (ADEA) as amended - prohibits discrimination on the basis of age with respect to individuals who are at least 40.

The Equal Pay Act of 1963 as amended - prohibits gender discrimination in payment of wages to women and men performing substantially equal work in the same establishment.

Section 504 of the Rehabilitation Act of 1973 - prohibits discrimination against the disabled.

Americans with Disabilities Act of 1990 (ADA) - prohibits discrimination against individuals with disabilities in employment, public service, public accommodations and telecommunications.

The Family and Medical Leave Act of 1993 (FMLA) - requires covered employers to provide up to 12 weeks of unpaid, job-protected leave to "eligible" employees for certain family and medical reasons.

The Pregnancy Discrimination Act of 1978 - prohibits discrimination in employment on the basis of pregnancy, childbirth, or related medical conditions.

Florida Educational Equity Act (FEEA) - prohibits discrimination on the basis of race, gender, national origin, marital status, or handicap against a student or employee.

Florida Civil Rights Act of 1992 - secures for all individuals within the state freedom from discrimination because of race, color, religion, sex, national origin, age, handicap, or marital status.

Title II of the Genetic Information Nondiscrimination Act of 2008 (GINA) - Prohibits discrimination against employees or applicants because of genetic information.

Veterans are provided re-employment rights in accordance with P.L. 93-508 (Federal Law) and Section 295.07 (Florida Statutes), which stipulate categorical preferences for employment.

In Addition:
School Board Policies 1362, 3362, 4362, and 5517 - Prohibit harassment and/or discrimination against students, employees, or applicants on the basis of sex, race, color, ethnic or national origin, religion, marital status, disability, genetic information, age, political beliefs, sexual orientation, gender, gender identification, social and family background, linguistic preference, pregnancy, and any other legally prohibited basis. Retaliation for engaging in a protected activity is also prohibited.

Revised: (05-12)