DISTANCE LEARNING PACKET

7TH GRADE
MATH
Integer Operations Review

Adding Integers
1) 85 + (-96) = _____  
2) 80 + 57 = _____  
3) 86 + (-38) = _____  

4) 22 + (-41) = _____  
5) -18 + (-45) = _____  
6) -32 + 48 = _____  

7) 6 + (-33) = _____  
8) 6 + (-47) = _____  
9) (-78) + 69 = _____  

10) -72 + (-30) + 10 = _____  
11) -83 + (-36) + 20 = _____  

Subtracting Integers
1) 1 – 3 = _____  
2) 2 – (-5) = _____  
3) 6 – (-9) = _____  

4) -7 – (-1) = _____  
5) -7 – 4 = _____  
6) 3 – (-2) = _____  

7) -1 – 9 = _____  
8) 2 – 9 = _____  
9) -8 – (-1) = _____  

Multiplying Integers
1) (-4)(-12) = _____  
2) -8 x (-8) = _____  
3) (-8)(-10) = _____  

4) 5 x 1 = _____  
5) (-10)(11) = _____  
6) (-3)(-8) = _____  

7) -2 x 6 = _____  
8) 7(-12) = _____  
9) 4 x (-10) = _____  

10) (-9)(-6)(2) = _____  
11) (-10)(-7)(-4) = _____  

Dividing Integers
1) -48 ÷ 6 = _____  
2) -81 ÷ (-9) = _____  
3) -18 ÷ (-6) = _____  

4) 25 ÷ (-5) = _____  
5) -10 ÷ 2 = _____  
6) -35 ÷ (-5) = _____  

7) -42 ÷ 6 = _____  
8) -70 ÷ (-7) = _____  
9) -16 ÷ (-8) = _____  

Name: __________________________
Write each ratio as a fraction in simplest form.

1. 7th-grade boys to 6th-grade boys ____________

2. 7th-grade girls to 6th-grade boys ____________

3. 7th graders to 6th graders ____________

4. boys to girls ____________

5. girls to all students ____________

Find each unit rate.

6. 78 mi on 3 gal

7. $52.50 in 7 h

8. 416 mi in 8 h

9. A 64-ounce container of sports juice costs $6.50. A 48-ounce container of the same juice costs $4.25. Which size container is the better buy?

Solve each proportion.

10. \( \frac{4}{r} = \frac{5}{20} \)

11. \( \frac{2}{9} = \frac{6}{k} \)

12. \( \frac{h}{35} = \frac{3}{7} \)

13. \( \frac{2.7}{3.0} = \frac{3.5}{x} \)
Set up a proportion to solve. Be your to answer the question with a complete sentence.

14. You can peel 4 potatoes in 10 minutes. How long will it take you to peel 14 potatoes?

15. You can read 45 pages of your new book in 2 hours. How many pages can you read in 3 hours?

16. Nine out of ten students prefer math class over lunch. How many students do not prefer math if 200 students were asked?

17. You estimate that you can do 12 math problems in 45 minutes. How long should it take you to do 20 math problems?

18. A girl makes 12 foul shots for every 8 that she misses. How many shots did she make if she shot 125 foul shots?

19. The ratio of girls to boys in the 6th grade is 6 to 7. How many girls are there if there are 364 total students?
Find the area of each.

1) \[ \text{Area} = 7.7 \times 2 \]

2) \[ \text{Area} = 1 \times 1 \]

3) \[ \text{Area} = 6.9 \times 2.4 \]

4) \[ \text{Area} = 6 \times 8 \]

5) \[ \text{Area} = 1.5 \times 4 \]

6) \[ \text{Area} = 5.9 \times 4 \]

7) \[ \text{Area} = 6 \times 18.7 \]

8) \[ \text{Area} = 6 \times 5.8 \]
Practice: Skills

Volume of Rectangular Prisms

Find the volume of each rectangular prism. Round to the nearest tenth if necessary.

1. 
   \[ \text{Volume} = \text{length} \times \text{width} \times \text{height} \]
   \[ 3 \text{ cm} \times 7 \text{ cm} \times 3 \text{ cm} \]

2. 
   \[ \text{Volume} = \text{length} \times \text{width} \times \text{height} \]
   \[ 10 \text{ in.} \times 6 \text{ in.} \times 5 \text{ in.} \]

3. 
   \[ \text{Volume} = \text{length} \times \text{width} \times \text{height} \]
   \[ 4 \text{ m} \times 3 \text{ m} \times 6 \text{ m} \]

4. 
   \[ \text{Volume} = \text{length} \times \text{width} \times \text{height} \]
   \[ 3 \text{ mm} \times 5 \text{ mm} \times 12 \text{ mm} \]

5. 
   \[ \text{Volume} = \text{length} \times \text{width} \times \text{height} \]
   \[ 7 \text{ in.} \times 2.8 \text{ in.} \times 9.5 \text{ in.} \]

6. 
   \[ \text{Volume} = \text{length} \times \text{width} \times \text{height} \]
   \[ 7.2 \text{ cm} \times 3 \text{ cm} \times 9 \text{ cm} \]

7. 
   \[ \text{Volume} = \text{length} \times \text{width} \times \text{height} \]
   \[ 2 \frac{1}{2} \text{ ft} \times 4 \text{ ft} \times 4 \frac{3}{4} \text{ ft} \]

8. 
   \[ \text{Volume} = \text{length} \times \text{width} \times \text{height} \]
   \[ 9.6 \text{ in.} \times 4.8 \text{ in.} \times 15 \text{ in.} \]

9. 
   \[ \text{Volume} = \text{length} \times \text{width} \times \text{height} \]
   \[ 4.5 \text{ cm} \times 1.5 \text{ cm} \times 1.2 \text{ cm} \]
12-4 Practice: Skills

Surface Area of Rectangular Prisms

Find the surface area of each rectangular prism. Round to the nearest tenth if necessary.

1. \( \) \[ \begin{array}{c}
\text{7 cm} \\
\text{12 cm} \\
\text{6 cm}
\end{array} \]

2. \( \) \[ \begin{array}{c}
\text{7 ft} \\
\text{1 ft} \\
\text{4 ft}
\end{array} \]

3. \( \) \[ \begin{array}{c}
\text{15 in.} \\
\text{9 in.} \\
\text{7 in.}
\end{array} \]

4. \( \) \[ \begin{array}{c}
\text{10 mm} \\
\text{3 mm} \\
\text{9 mm}
\end{array} \]

5. \( \) \[ \begin{array}{c}
\text{8.5 cm} \\
\text{4 cm} \\
\text{3 cm}
\end{array} \]

6. \( \) \[ \begin{array}{c}
\text{3.7 in.} \\
\text{6 in.} \\
\text{4.3 in.}
\end{array} \]

7. \( \) \[ \begin{array}{c}
\text{6 ft} \\
\text{12 ft} \\
\text{7 ft}
\end{array} \]

8. \( \) \[ \begin{array}{c}
\text{8.3 in.} \\
\text{4.5 in.} \\
\text{4.1 in.}
\end{array} \]

9. \( \) \[ \begin{array}{c}
\text{4.1 mm} \\
\text{7.3 mm} \\
\text{6.4 mm}
\end{array} \]

10. A cube has a surface area of 126 square feet. What is the area of one face?

11. Find the surface area of a rectangular prism that has a length of 8 inches, a width of 3 inches, and a height of 6 inches.
1) Harold bought 5 apples for $1.30. What is the unit price?

2) Allison's car can drive 450 miles on just 12 gallons of gas. What's the mileage per gallon?

3) The copier company supplies 16 reams of paper for $55.84. What is the price per ream?

4) In his race, Speedy McGoo ran the 400 meter dash in 14.5 seconds. What is his speed in meters per second?

5) Ashley spent 20 minutes typing a 3,000 word essay. What's her speed in words per minute?

6) In the Miller family, there are 8 boys and 12 girls. What is the ratio of boys to girls?

7) In Deanna's refrigerator, there are 24 cans of Pepsi and 20 cans of Root Beer. What is the ratio of Root Beer to Pepsi?

8) Jen's Flower Shop sells flowers for $1.25 each. Mary's Flower Shop sells a dozen flowers for $15.48. Who has the best deal?
Ratios and Unit Rates – Worksheet #2

At Duckie’s Gas ‘n’ Stuff, Gatorade is sold in 4 different sizes as shown below.

<table>
<thead>
<tr>
<th>Size (oz)</th>
<th>Price ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>$1.39</td>
</tr>
<tr>
<td>24</td>
<td>$1.89</td>
</tr>
<tr>
<td>32</td>
<td>$2.69</td>
</tr>
<tr>
<td>64</td>
<td>$5.19</td>
</tr>
</tbody>
</table>

Which size Gatorade is the better deal?

A. 16 oz
B. 24 oz
C. 32 oz
D. 64 oz

Bags of Cathy’s Cat Cuisine come in four different weights, shown below:

<table>
<thead>
<tr>
<th>Weight (lb)</th>
<th>Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>$6.00</td>
</tr>
<tr>
<td>10</td>
<td>$11.00</td>
</tr>
<tr>
<td>15</td>
<td>$16.50</td>
</tr>
<tr>
<td>20</td>
<td>$21.00</td>
</tr>
</tbody>
</table>

Which bags have equivalent unit prices?

A. the 5- and 10-lb bags
B. the 5-, 10-, and 15-lb bags
C. the 10- and 15-lb bags
D. the 10-, 15-, and 20-lb bags

Salvatore’s Spaghetti Sauce comes in four sizes of jar: a 12-ounce jar for $1.44, an 18-ounce jar for $2.34, a 36-ounce jar for $3.96, and a 54-ounce jar for $5.40. Which jar has the highest unit price?

A. the 12-ounce jar
B. the 18-ounce jar
C. the 36-ounce jar
D. the 54-ounce jar

Sound travels 5,500 feet through air in approximately 5 seconds. At approximately what rate does sound travel through air?

A. 1,100 feet per second
B. 1,500 feet per second
C. 2,750 feet per second
D. 5,500 feet per second