Math 6 - Unit 2: Ratios, Rates and Proportions Name: $\qquad$
Unit 2 Interim Assessment Study Guide
Class Period: 1234 Date: $\qquad$

1) Alanna is buying packs of pencils to give to Mrs. Katz. The table below shows the relationship between packs and pencils.

| Number of Packs | Number of Pencils |
| :---: | :---: |
| 1 | 12 |
| 2 | 24 |
| 5 | 60 |
| 12 | $?$ |

How many pencils are there in 12 packs?

Answer: $\qquad$
3) An auto parts factory has 4 machines that make the same spark plug. The rate of production for each machine is shown in the table below.

| Machine | \# of Spark <br> Plugs Made | Time (Hours) |
| :---: | :---: | :---: |
| W | 115 | 5 |
| X | 144 | 6 |
| Y | 154 | 7 |
| Z | 180 | 8 |

Based on the data given, which machine works at the fastest rate?
2) A train travels 492 miles in 6 hours. At this rate, how many miles will the train travel in 14 hours?

Answer: $\qquad$
4) Mrs. Katz drove 156 miles in 2 hours at a constant rate. What is TRUE if she drives for 3 hours at this rate?
A) Mrs. Katz would travel 234 miles.
B) Mrs. Katz would travel 312 miles.
C) Mrs. Katz would travel 315 miles.
D) Mrs. Katz would travel 468 miles.

Answer: $\qquad$
$\qquad$

| 5) Mrs. Parker paid $\$ 12.72$ for 4 gallons of apple juice. What was the price per gallon? <br> Answer: $\qquad$ | 6) The Chick-fil-A down the street can serve 208 cars over a 4 -hour period. At this rate, how many cars can be served in 3 hours? <br> Answer: |
| :---: | :---: |
| 7) A waiter receives a tip of $\$ 3.24$. If this tip represents $18 \%$ of the price of the meal, what is the price of the meal? <br> Answer: $\qquad$ | 8) On her last test Grace answered $80 \%$ of the questions correctly. If there were 40 questions on the test, how many did Grace answer correctly? <br> Answer: $\qquad$ |
| 9) A recipe for root beer floats requires 3.5 gallons of root beer. How many quarts of root beer are required for the recipe? <br> (1 gallon = 4 quarts) <br> Answer: $\qquad$ | 10) Mrs. Katz is 62 inches tall. What is her height in centimeters? ( $\mathbf{2} .54 \mathrm{~cm}=1$ inch) <br> Answer: $\qquad$ |

Math 6 - Unit 2: Ratios, Rates and Proportions Name: $\qquad$
Unit 2 Interim Assessment Study Guide ANSWER KEY

Class Period: 1234 Date: $\qquad$

1) Alanna is buying packs of pencils to give to Mrs. Katz. The table below shows the relationship between packs and pencils.

| Number of Packs | Number of Pencils |
| :---: | :---: |
| 1 | 12 |
| 2 | 24 |
| 5 | 60 |
| 12 | $?$ |

How many pencils are there in 12 packs?

Answer: 96
3) An auto parts factory has 4 machines that make the same spark plug. The rate of production for each machine is shown in the table below.

| Machine | \# of Spark <br> Plugs Made | Time (Hours) |
| :---: | :---: | :---: |
| W | 115 | 5 |
| X | 144 | 6 |
| Y | 154 | 7 |
| Z | 180 | 8 |

Based on the data given, which machine works at the fastest rate?
2) A train travels 492 miles in 6 hours. At this rate, how many miles will the train travel in 14 hours?

Answer: 1148 mph
4) 4) Mrs. Katz drove 156 miles in 2 hours at a constant rate. What is TRUE if she drives for 3 hours at this rate?
A) Mrs. Katz would travel 234 miles.
B) Mrs. Katz would travel 312 miles.
C) Mrs. Katz would travel 315 miles.
D) Mrs. Katz would travel 468 miles.
5) Mrs. Parker paid $\$ 12.72$ for 4 gallons of apple juice. At this rate, how much would she pay for 9 gallons of apple juice?
6) The Chick-fil-A down the street can serve 208 cars over a 4-hour period. At this rate, how many cars can be served in 3 hours?

Answer: 156 cars
8) On her last test Grace answered $80 \%$ of the questions correctly. If there were 40 questions on the test, how many did Grace answer correctly?

Answer: 32 questions
9) A recipe for root beer floats requires 3.5 gallons of root beer. How many quarts of root beer are required for the recipe? (1 gallon = 4 quarts)
10) Mrs. Katz is 62 inches tall. What is her height in centimeters? ( $\mathbf{2 . 5 4} \mathbf{~ c m}=1$ inch)

