Math 6 - Unit 2: Ratios, Rates and Proportions Name:
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 |
| 8 | $?$ |

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) Zara is having a bake sale for the local animal shelter. Her recipe for cookies uses 4 cups of flour to make 60 cookies. How many cups of flour will Alice need to make 360 cookies?
$\qquad$
$\qquad$
5) Mrs. Parker paid $\$ 12.72$ for 4 gallons of apple juice. At this rate, how much would she pay for 9 gallons of orange juice?
6) The Chick-fil-A down the street can serve 208 cars over a 4-hour period. What is the average number of cars that can be served in 30 minutes?

## Answer:

$\qquad$
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?

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? (1 gallon = 4 quarts)
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: $\qquad$
10) Mrs. Katz is 62 inches tall. What is her height in centimeters? ( $\mathbf{2 . 5 4} \mathbf{~ c m}=1$ inch)
$\qquad$

Math 6 - Unit 2: Ratios, Rates and Proportions Name:
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 |
| 8 | $?$ |

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) Zara is having a bake sale for the local animal shelter. Her recipe for cookies uses 4 cups of flour to make 60 cookies. How many cups of flour will Alice need to make 360 cookies?
5) Mrs. Parker paid $\$ 12.72$ for 4 gallons of apple juice. At this rate, how much would she pay for 9 gallons of orange juice?
6) The Chick-fil-A down the street can serve 208 cars over a 4-hour period. What is the average number of cars that can be served in 30 minutes?
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?
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)

