

Name _____

CALCULATING UNIT RATES #3

Directions: For each problem below, set up a proportion to represent the situation. Then solve the proportion to find the *unit rate*.

Example: Malcolm scored 80 points in two games. How many points per game did he score?

$$\frac{80 \text{ pts.}}{2 \text{ games}} = \frac{x}{1 \text{ game}} \quad 2x = 80 \quad x = 40 \text{ points/game}$$

- 1) Travis scored 780 points in 30 games. How many points per game did he score?

Proportion: $\frac{780 \text{ points}}{? \text{ games}} = \frac{x}{1 \text{ game}}$ Solution: _____

- 2) Emma earned \$456 in 38 hours. How much did she earn per hour?

Proportion: $\frac{? \text{ dollars}}{38 \text{ hours}} = \frac{x}{1 \text{ hour}}$ Solution: _____

- 3) Jacob drove 66 laps in 33 minutes. How many laps per minute did he run?

Proportion: $\frac{66 \text{ laps}}{33 \text{ minutes}} = \frac{x}{? \text{ minute}}$ Solution: _____

- 4) Madison flew 1,899 miles in 211 minutes. How many miles per minute did she fly?

Proportion: $\frac{1,899 \text{ miles}}{211 \text{ minutes}} = \frac{?}{1 \text{ minute}}$ Solution: _____

- 5) The temperature dropped 36 degrees in 4 days. How many degrees per day did the temperature drop?

Proportion: $\frac{? \text{ degrees}}{? \text{ days}} = \frac{x}{1 \text{ day}}$ Solution: _____

- 6) Sophia read 143 books in 13 months. How many books per month did she read?

Proportion: $\frac{? \text{ books}}{? \text{ months}} = \frac{x}{1 \text{ month}}$ Solution: _____

- 7) Nicholas filled his 252 gallon pool with water in 4 hours. How many gallons per hour did he use?

Proportion: $\frac{252 \text{ gallons}}{? \text{ hours}} = \frac{x}{? \text{ hour}}$ Solution: _____

- 8) Olivia drove 1,136 miles in 16 hours. What was her speed in miles per hour?

Proportion: $\frac{? \text{ miles}}{16 \text{ hours}} = \frac{x}{? \text{ hour}}$ Solution: _____

- 9) Matthew made 589 calls in 31 days. What is the average number of calls he made in a day?

Proportion: $\frac{? \text{ calls}}{? \text{ days}} = \frac{x}{? \text{ day}}$ Solution: _____

- 10) Hannah's plane climbed 3,975 feet in 75 seconds. How fast did her plane climb every second?

Proportion: $\frac{? \text{ feet}}{? \text{ seconds}} = \frac{?}{? \text{ second}}$ Solution: _____