

11/19

Proportions

can write a proportion and use different strategies to solve for the unknown.

EX A bicyclist rides 18 miles in 2 hours.

How far will the bicyclist ride at this speed in 5 hours?

$$\frac{18 \text{ mi}}{2 \text{ hr}} = \frac{x \text{ mi}}{5 \text{ hr}}$$

$$18 \cdot 5 = 2 \cdot x$$

$$\frac{90}{2} = \frac{2x}{2}$$

$$\boxed{45 = x \text{ miles}}$$

EX Are these proportional?

$$\frac{5}{9} = \frac{40}{44}$$

(equivalent)
equal

$$9 \times 8 = 72$$

These are not proportional because...