When proportions are written as fractions, their cross products are equal.

$\frac{5}{10} = \frac{1}{2} \longrightarrow \frac{5}{10} \times \frac{1}{2}$

$5 \cdot 2 = 10 \cdot 1 \longrightarrow 10 = 10$

Finding the cross products of a suspected proportion can be used as a verification method.

Practice Run

1. Fill in the blanks for the time equivalencies.

   a. 1 minute = _____ seconds
   b. 1 hour = _____ minutes
   c. 1 day = _____ hours
   d. 1 hour = _____ seconds
   e. 1 day = _____ seconds
   f. 24 hours = _____ minutes
   g. 2 hours = _____ seconds
   h. 5 days = _____ hours
   i. 2 days = _____ minutes

2. Solve for the missing variable. Show all steps and round your answers to the nearest hundredth.

   a. $\frac{10.75}{x} = \frac{2}{5}$

   b. $\frac{36}{22} = \frac{x}{29}$

Compare your answers.

1. Fill in the blanks for the time equivalencies.

   a. 1 minute = 60 seconds
   b. 1 hour = 60 minutes
   c. 1 day = 24 hours
   d. 1 hour = $60 \times 60 = 3600$ seconds
   e. 1 day = $24 \times 60 \times 60 = 86400$ seconds
   f. 24 hours = $24 \times 60 = 1440$ minutes
   g. 2 hours = $2 \times 60 \times 60 = 7200$ seconds
   h. 5 days = $5 \times 24 = 120$ hours
   i. 2 days = $2 \times 24 \times 60 = 2880$ minutes

2. Solve for the missing variable. Show all steps and round your answers to the nearest hundredth.

   a. $\frac{10.75}{x} = \frac{2}{5}$

   $$\frac{10.75}{x} = \frac{2}{5}$$
   $$10.75 \cdot 5 = 2x$$
   $$\frac{53.75}{2} = \frac{2}{2}x$$
   $$26.875 = x$$
   $$26.88 \doteq x$$

   b. $\frac{36}{22} = \frac{x}{29}$

   $$\frac{36}{22} = \frac{x}{29}$$
   $$36 \cdot 29 = 22x$$
   $$\frac{1044}{22} = \frac{22}{22}x$$
   $$47.\overline{45} = x$$
   $$47.45 \doteq x$$