

14.4

Solving Proportions

Do Now

1) Write a proportion to find how many points a student needs to score on the test to get the given score.

a) test worth 80 points; test score of 80%

b) test worth 150 points; test score of 96%

Review

Solve the missing variable in the proportion mentally.

$$2) \frac{5}{8} = \frac{20}{\textit{d}}$$

$$3) \frac{7}{z} = \frac{14}{10}$$

$$4) \frac{21}{24} = \frac{\textit{x}}{8}$$

What are Proportions?

Proportions are _____

$$\frac{3}{5} = \frac{6}{10}$$

Cross Products

Using Cross Products to Solve Proportions

$$1) \quad \frac{w}{6} = \frac{6}{9}$$

Using Cross Products to Solve Proportions

$$2) \quad \frac{12}{10} = \frac{a}{15}$$

Using Cross Products to Solve Proportions

$$3) \quad \frac{9}{y} = \frac{3}{17}$$

Using Cross Products to Solve Proportions

$$4) \quad \frac{x}{8} = \frac{7}{10}$$

Practice

$$5) \quad \frac{x}{25} = \frac{6}{10}$$

Practice

$$6) \quad \frac{2}{9} = \frac{3}{d}$$

Practice

$$7) \quad \frac{b}{10} = \frac{3}{4}$$

Practice

$$8) \quad \frac{c}{15} = \frac{5}{6}$$