

Unit 1

Solving Proportions and Quiz Review

Review

Solve the missing variable in the proportion mentally.

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

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

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

What are Proportions?

Proportions are _____

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

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

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

Solving

- 1) Cross-multiply
- 2) Solve like a multi-step equation

Examples

$$a) \frac{2}{5} = \frac{4}{x+1}$$

$$b) \frac{21}{y-8} = 3$$

Examples

$$c) \frac{7}{d+5} = \frac{10}{d+2}$$

Practice

$$1) \frac{4}{x} = \frac{8}{x-3}$$

$$2) \frac{-49}{7} = \frac{a+7}{6}$$

Practice

$$3) \frac{8}{12} = \frac{r}{r+1}$$

$$4) \frac{42}{63} = \frac{k}{k-2}$$