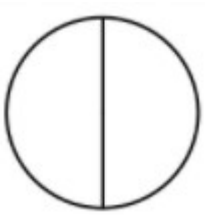
Name: _____ Date: _____

Solving Proportions

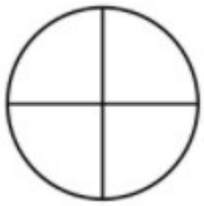
A **proportion** is an _____ stating that two _____ are _____.

We can write ratios as _____.

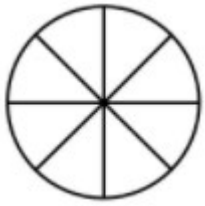
Revisiting Fractions: Shade half of each circle. Then write the fraction represented by each picture,



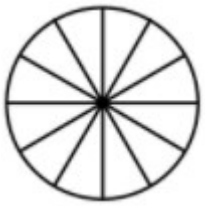
$\frac{\quad}{2}$



$\frac{\quad}{4}$



$\frac{\quad}{8}$



$\frac{\quad}{12}$

Now reduce each fraction. What do you notice?

We call two or more fractions _____ if they all simplify to the same fraction.

Determine if the following fractions are proportional.

1. $\frac{2}{3}$ and $\frac{8}{12}$
2. $\frac{3}{2}$ and $\frac{18}{8}$
3. $\frac{12}{24}$ and $\frac{3}{4}$
4. $\frac{4}{3}$, $\frac{16}{12}$, and $\frac{8}{6}$

Solving Proportions

If part of the proportion is unknown, we can _____ - _____ to solve for the missing piece.

1. $\frac{10}{x}=\frac{8}{4}$
2. $\frac{4}{9}=\frac{2}{x}$
3. $\frac{6}{x+3}=\frac{3}{8}$
4. $\frac{x+4}{2}=\frac{x+2}{4}$