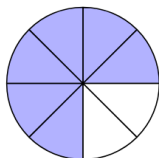
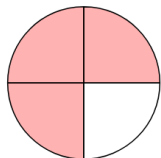


Equivalent Fractions

Warmup

- 1.** What fraction of the circles are shaded?



- 2.** Evaluate each expression for $x = 3$, $y = 6$, and $z = -1$

$y+x$

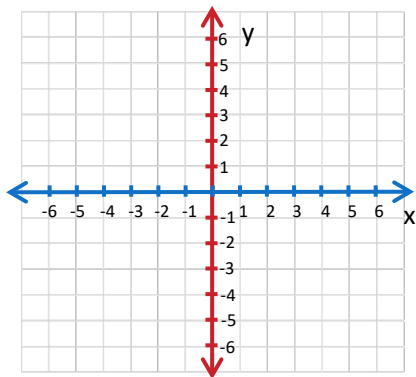
$y+z$

$z-y$

$x-y$

- 3.** *Solve and Check*
 $3.4p = 5.1$

4. Plot the points
A:(5,-1), B:(2,4), C:(0,-3), D:(-4,-3)



5. Write the next three terms in the sequence

6, 60, 600, _____,
_____, _____

The sequence is

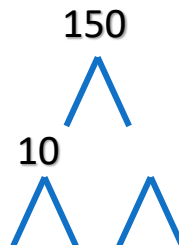
☐ arithmetic

☐ geometric

☐ Neither

The common ratio is _____

6. What is the prime factorization of 150?



Equivalent Fractions

- I. Fractions
- II. Equivalent Fractions
- III. Simplifying Fractions

Homeschool



Honor Roll

Learn ~ Persevere ~ Succeed

Pre-Algebra and Geometry I

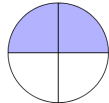
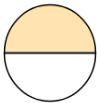
Wendy Harper

www.HsHonorRoll.com

I. Fractions

Label the top and bottom of a fraction with their proper names.

*Identify each Fraction,
then compare their values*

[illegible]

1 = — = — = — = — = —

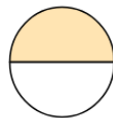
[illegible]

II. Equivalent Fractions

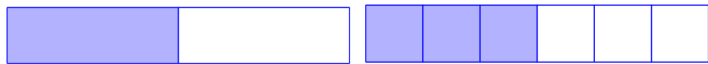
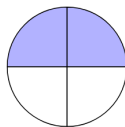
What number can we multiply by and not change the value?

What property does this represent?

$$\frac{1}{2} \cdot \underline{\quad} = \frac{1}{2}$$

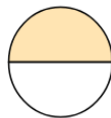


$$\frac{1}{2} \cdot \frac{2}{2} = \underline{\quad}$$

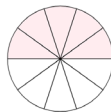


$$\frac{1}{2} \cdot \underline{\quad} = \frac{1}{2}$$

$$\frac{1}{2} \cdot \frac{3}{3} = \underline{\quad}$$



$$\frac{1}{2} \cdot \underline{\quad} = \frac{1}{2}$$



$$\frac{1}{2} \cdot \frac{5}{5} = \underline{\quad}$$

Find the missing numerator to make equal fractions.

$$\frac{4}{5} \cdot \text{---} = \frac{\text{---}}{30}$$

$$\frac{2}{7} \cdot \text{---} = \frac{\text{---}}{42}$$

11.

$$\frac{2}{3} = \frac{\text{---}}{30}$$

12.

Find the missing numerator to make equal fractions.

$$\frac{1}{8} \cdot \frac{4}{4} = \frac{4}{\text{---}}$$

$$\frac{3}{4} \cdot \text{---} = \frac{\text{---}}{20}$$

13.

$$\frac{7}{9} = \frac{49}{\text{---}}$$

14.

Equivalent Fractions: Fractions that are equal, or have the same value, are called equivalent fractions.

$$\frac{1}{2} \cdot \frac{6}{6} = \frac{6}{12}$$

Multiply the numerator and denominator of the fraction by the **same number**.

III. Reduce Fractions to Simplest Form

At a group pizza party Samantha asked for $\frac{4}{16}$ of a pizza. How much of the pizza did she want?



$$\frac{4}{16} = \frac{2 \cdot 2}{2 \cdot 2 \cdot 2 \cdot 2} = \text{---}$$

The prime factorization of 4 is $2 \cdot 2$ and 16 is $2 \cdot 2 \cdot 2 \cdot 2$, the numerator must have a value, therefore use ____
The denominator is $2 \cdot 2 = \text{---}$

$$\frac{4}{16} = \frac{4 \cdot 1}{4 \cdot 4} = \text{---}$$

The GCF (Greatest Common Factor) of 4 and 16 is 4.
Write the numerator as a product of the GCF and a factor ($4 \cdot 1 = 4$)
Write the denominator as a product of the GCF and a factor ($4 \cdot 4 = 16$)
 $\frac{4}{4} = 1$ Cancel the fourths. The answer is ____

15. Find the GCF

Reduce using the GCF

$$\frac{24}{40} = \text{---} = \text{---}$$

15. Reduce using the GCF

$$\frac{12}{28} = \text{---} = \text{---}$$

Simplify the Fractions using prime factorization

$$\frac{2}{4} = \frac{1 \cdot 2}{2 \cdot 2} = \frac{1}{2} \cdot \frac{2}{2}$$

$$\frac{5}{10} = \frac{1 \cdot 5}{2 \cdot 5} = \frac{1}{2}$$

$$\frac{33}{60} = \frac{11 \cdot 3}{2^2 \cdot 3 \cdot 5} = \frac{11}{20}$$

17. Simplify the fraction using prime factorization

$$\frac{15}{150} =$$

18. Write the fraction in simplest form

Fractions in Simplest : Fractions are called simplified when the GCF of the numerator and the denominator is 1.

$\frac{1}{2}$ and $\frac{9}{17}$ are both written in simplest form

Circle the fractions that are written in simplest form.

$$\frac{2}{2}$$

$$\frac{3}{9}$$

$$\frac{23}{100}$$

$$\frac{7}{63}$$

$$\frac{200}{500}$$

