Warm-Up

What *fraction* of this class is wearing glasses?

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could this be written as a ratio?

What is a ratio?

- It shows how much of one thing there is compared to another.
- Example:
 - > If there are 2 cats and 3 dogs, the ratio of cats to dogs is 2:3.

A bag has 8 red marbles and 12 blue marbles.

- Ratio of red to blue =
- > part-to-part X Fraction red to blue =
- Ratio of red to total =
- Fraction of marbles that are

There are 10 boys and 15 girls in a class.

- Ratio of boys to girls =
- Ratio of girls to total =
- Fraction of class that are girls =

What is a Fraction?

- A fraction shows a part of a whole.
- It has two numbers:

top number (numerator)
bottom number (denominator)

- Numerator = how many parts you have.
- Denominator = the number you have in total.

Fractions and Ratios Together

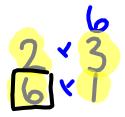
- A fraction is **part-to-whole**.
- A ratio can be part-to-part or part-to-whole.

Equivalent Fractions and Ratios

- Fractions and ratios can be simplified
 divide both terms by their greatest common factor
 - > if they do not have a common factor, it is simplified.

Example:

Simplify 67







Let's practice these together

1. Simplify:

Simplify Fractions:

1.
$$\frac{6}{12} = \frac{3}{3}$$

2.
$$\frac{15}{25} = \frac{5}{3}$$

3.
$$\frac{20}{30} = \frac{3}{30}$$

4.
$$\frac{18}{24} = 4$$

5.
$$\frac{16}{20} = 5$$

Simplify Ratios:

1.
$$6:12=$$

2.
$$15:25 =$$

3.
$$20:30=$$

4.
$$18:24=$$

5.
$$16:20=$$

Brain Break

Homework: simplifying fractions worksheet