

## 4-6 Dividing Whole Numbers by Fractions

## 4-7 Dividing Fractions

KEEP, CHANGE, FLIP!

Finding the reciprocal:

$$\frac{3}{5} \longrightarrow \frac{5}{3}$$

You try:

$$\frac{4}{5} \rightarrow \frac{5}{4}$$

$$\frac{6}{3} \rightarrow \frac{3}{6}$$

Dividing Fractions:

**Steps:**

- 1) Set up the problem (if there's a whole number put it over 1)
- 2) **Keep** the first fraction the same
- 3) **Change** the DIVISION sign to a MULTIPLICATION sign
- 4) **Flip** the second fraction upside down (the reciprocal)
- 5) Multiply the numerators together
- 6) Multiply the denominators together
- 7) Simplify

Examples:

$$\frac{1}{3} \div \frac{1}{2}$$

$$\frac{1}{3} \times \frac{2}{1} = \frac{2}{3}$$

$$\frac{4}{5} \div \frac{4}{9}$$

$$\frac{4}{5} \times \frac{9}{4} = \frac{9}{5} \quad 1\frac{4}{5}$$

$$12 \div \frac{3}{5}$$

$$^4 \frac{12}{1} \times \frac{5}{3} = \frac{20}{1} = 20$$

$$\frac{1}{6} \div 2$$

$$\frac{1}{6} \div \frac{2}{1}$$

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