## Multiplying with Rational Numbers

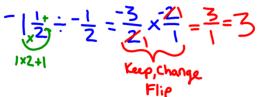
- 1. Make mixed numbers into improper fractions.
- 2. Multiply Straight Across (Cross-Cancel if possible)
- 3. Simplify
- 4. CHECK YOUR SIGN!

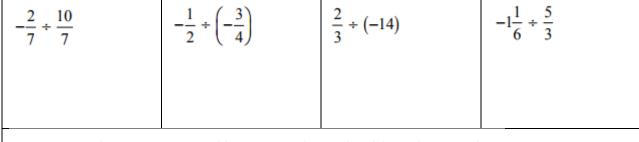
$$-\frac{1}{1}\frac{2}{3}\times\frac{1}{2}=\frac{1}{3}\times\frac{1}{2}=\frac{7}{3}=\frac{7}{3}$$

$$\frac{4}{9} \times \left(-\frac{6}{7}\right) \qquad -\frac{3}{4} \cdot \left(-\frac{10}{9}\right) \qquad \frac{3}{2} \left(-2\frac{2}{9}\right) \qquad \left(-1\frac{3}{8}\right)^2$$
There are 15 people in a room. Each person ate  $\frac{2}{3}$  of a pizza. There was no pizza remaining. How many pizzas were in the room?

## Steps Dividing with Rational Numbers

- 1. Make mixed numbers into improper fractions.
- 2. Multiply by the reciprocal!!
- 3. Follow Multiplication rules ....





How many three-quarter pound burgers can be made with twelve pounds of hamburger?

## **Multiplying with Rational Numbers**



18.330

Steps: 2.35 ¥7.8 2.35 \$ 7.8 18330 1.) Multiply as usual, ignoring the decimals. 个个 2.) Determine the total number of digits behind the original numbers' 1880 ()(A decimal points +1645 18330

5.) Place the same number of digits behind the decimal point in the product.

50, 2.35 \$ 7.8 = 18.33

<b>1.)</b> -2.5 × -17	<b>2.)</b> 6.25 × -8	<b>3.)</b> -7.1 × -2.8	<b>4.)</b> -4.8 × 6.3
5.) 2.45 × -3.9	6.) 12.4 × 3.5	<b>7.)</b> -3.9 × 1.32	8.) $-7.5 \times 2(-8.3)$

**Dividing with Rational Number** 

Steps:

1.) If the divisor is not a whole number, move the decimal point to the right to make it a whole number.

2.) Move the decimal point in the dividend the same number of places.

Divide as usual.

4.) Bring your decimal point straight up into the solution.

<b>1.)</b> 4.2 ÷ (-1.2)	<b>2.)</b> −51.2 ÷ (−8)	<b>3.)</b> −8.176 ÷ (−0.56)	<b>4.)</b> −27.44 ÷ 0.98
<b>5.)</b> -4.2 ÷ (- 0.3)	6.) 30.96 ÷ (- 7.2)	<b>7.)</b> -3.71 ÷ (-2.65)	<b>8.)</b> –12.6 ÷ 2.8

5.168.5 -> 5)68.5

don't need

m, ge fer itt

5168.5 4

5 6.85

5)68.5 -5+ 18 -55