

## 6.3 (Page 211)

## Multiplying Fractions

To multiply fractions, multiply the numerators and multiply the denominators. The denominators cannot be zero.

Simply the fraction, if needed.

There are two methods to multiplying fractions: either multiply the numerators and multiply the denominators or simplify a numerator & denominator before multiplying (if you can).

## 6.3 (Page 211)

## Multiplying Fractions

Example: Solve each equation.

$$-\frac{5}{4} \cdot \frac{1}{3}$$

$$\frac{-5}{4} \cdot \frac{1}{3} = \boxed{\frac{-5}{12}}$$

## 6.3 (Page 211)

## Multiplying Fractions

Example: Solve each equation.

$$\frac{8}{7} \cdot \frac{5}{10}$$

Handwritten annotations: A red circle around the 8 and 10, with a red arrow pointing from 8 to 10. A green circle around the 7 and 5, with a green arrow pointing from 7 to 5. Below the 7 is a green '1' and below the 10 is a red '5'.

$$\frac{4}{1} \cdot \frac{1}{5} = \boxed{\frac{4}{5}}$$

## 6.3 (Page 211)

## Multiplying Fractions

Example: Solve each equation.

$$\frac{2}{3} \cdot \frac{5}{4}$$

Handwritten annotations: A red circle around the 2 and 4, with a red arrow pointing from 2 to 4. A red '2' is written below the 4.

$$\frac{1}{3} \cdot \frac{5}{2} = \boxed{\frac{5}{6}}$$

## 6.3 (Page 211)

## Multiplying Fractions

Example: Solve each equation.

$$\frac{4}{9} \cdot \frac{7}{4} = \frac{7}{9}$$

## 6.3 (Page 211)

## Multiplying Fractions

Example: Solve each equation.

$$\frac{-2}{1} \cdot \frac{3}{7} = \frac{-6}{7}$$

## 6.3 (Page 211)

## Multiplying Fractions

Example: Solve each equation.

$$-2\frac{+2}{\times 3} \cdot 4\frac{+1}{\times 10}$$

$$\frac{-8}{3} \cdot \frac{41}{10} = \frac{-164}{15} \text{ OR } -10\frac{14}{15}$$

*(Handwritten work shows a red circle around the fractions with a red '4' above the 8 and a red '5' below the 10, indicating a simplification step.)*

## 6.3 (Page 211)

## Multiplying Fractions

Example: Solve each equation.

$$-1\frac{+1}{\times 4} \cdot 9$$

$$-\frac{5}{4} \cdot \frac{9}{1} = \frac{-45}{4} \text{ OR } -11\frac{1}{4}$$

## 6.3 (Page 211)

## Multiplying Fractions

Example: Solve each equation.

$$-2\frac{+1}{\times 5} \cdot -1\frac{+3}{\times 4}$$

$$-\frac{11}{5} \cdot -\frac{7}{4} = \boxed{\frac{77}{20} \text{ or } 3\frac{17}{20}}$$

## 6.3 (Page 211)

## Multiplying Fractions

Example: Solve each equation.

$$-1\frac{+5}{\times 7} \cdot -2\frac{+1}{\times 2}$$

$$\cancel{-\frac{12}{7}} \cdot \cancel{-\frac{5}{2}} = \boxed{\frac{30}{7} \text{ or } 4\frac{2}{7}}$$

## 6.3 (Page 211)

## Multiplying Fractions

Example: Solve each equation.

$$-2\frac{13}{8} \cdot 2\frac{1}{2}$$

$$\frac{-19}{8} \cdot \frac{5}{2} = \boxed{\frac{-95}{16} \text{ or } -5\frac{15}{16}}$$

6.6 Dividing Fractions.notebook