

Multiplying and Dividing Fractions

How to Multiply Fractions

- DO NOT need common _____
- multiply straight across for both numerators and denominators
- simplify if necessary

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

Multiplying Practice

$$\frac{4}{9} \times \frac{3}{6}$$

$$-\frac{1}{8} \times -\frac{5}{6}$$

$$-\frac{1}{3} \times \frac{8}{7}$$

How to Multiply Mixed Numbers

- convert all mixed numbers to improper fractions
- write any whole number over _____
- multiply across
- simplify if necessary

$$6 \times 1\frac{1}{4}$$

More Multiplying Practice

$$5\frac{1}{2} \times 1\frac{2}{3}$$

$$-\frac{3}{16} \times 4\frac{2}{3}$$

$$-2\frac{1}{8} \times -10$$

What is a RECIPROCAL?

- a RECIPROCAL is the inverse of a fraction
- the numerator and denominator swap locations

$$\frac{3}{4}$$

$$\frac{11}{2}$$

$$\frac{9}{10}$$

$$7$$

Notes - Multiplying and Dividing Fractions.notebook

How to DIVIDE fractions

- Keep the first fraction the same
- Change division to _____
- Take reciprocal of second fraction
- Multiply across
- Simplify if possible

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

Dividing Practice

$$-1\frac{7}{8} \div -8$$

$$\frac{3}{2} \div \frac{11}{2}$$

$$4\frac{1}{6} \div -2\frac{2}{3}$$

$$-\frac{3}{8} \div -12$$

Multiplying & Dividing Applications

An encyclopedia has 30 volumes. The total weight of these volumes is $71\frac{1}{4}$ pounds. What is the weight of one encyclopedia?

Multiplying & Dividing Applications

About $\frac{4}{5}$ of the weight of a pineapple is water. About how much water would you expect to find in $2\frac{1}{2}$ pounds of pineapple?

Try on Your Own!

The students in Ms. Damitz's class were given a prize for collecting the most toys for the school toy drive. Their prize was $16\frac{1}{2}$ gallons of ice cream. If the students ate $\frac{1}{3}$ of this ice cream before going to lunch, how many gallons of ice cream did they eat?

At every practice, every player gets $\frac{1}{5}$ of a bottle of Refresh, a sports drink. For how many days will $2\frac{3}{5}$ bottles of the sports drink last?