

Algebra II Review Notes

Essential Question:

How do I multiply and divide fractions.

Terminology

KCF (Not KFC): - TD divide fractions

Keep the first fraction $\frac{1}{2} \div \frac{3}{4}$

Change the sign to multiply $\frac{1}{2} \cdot \frac{4}{3} =$

Flip the second fraction then multiply straight across.

Order of Operations: Try $\frac{1}{2} \div \frac{1}{2}$

TD multiply

multiply the top across

multiply the bottom across

$$\frac{3}{4} \cdot \frac{1}{2} = \frac{3}{8}$$

Parenthesis (what is inside parenthesis - and square roots first)

Exponents

Multiply } from left to right in the same step

Divide }

Add } from left to right in the same step

Subtract }

Multiply or divide. Write each answer in simplest form

1.

$$\frac{7}{3} \cdot \frac{2}{5} = \frac{14}{15}$$

Try

$$\frac{3}{8} \cdot \frac{1}{9}$$

2.

$$2 \frac{6}{7} \cdot \frac{5}{7} = \frac{10}{7}$$

3.

$$\begin{aligned} & (\div 4) \frac{5}{8} \cdot \frac{4}{9} (\div 4) \\ & \frac{5}{2} \cdot \frac{1}{9} \\ & = \frac{5}{18} \end{aligned}$$

4.

$$\frac{7}{8} \div \frac{3}{4} = 2 \frac{7}{8} \cdot \frac{4}{3} = \frac{7}{6}$$

5.

$$\begin{aligned} & \frac{3}{2} \div \frac{3}{4} \\ & = \frac{3}{2} \cdot \frac{4}{3} (\div 2) \\ & = \frac{6}{3} \text{ Simplify } \frac{6}{3} = 2 \end{aligned}$$

Fraction Multiplication 3
With Cross-Cancelling
Version 2

Name: _____

Solve the fraction problem and reduce the answer to simplest form.

$$\frac{8}{10} \times \frac{5}{8} =$$

$$\frac{3}{7} \times \frac{2}{6} =$$

$$\frac{6}{10} \times \frac{2}{5} =$$

$$\frac{2}{3} \times \frac{2}{6} =$$

$$\frac{3}{10} \times \frac{5}{7} =$$

$$\frac{7}{9} \times \frac{2}{6} =$$

$$\frac{2}{9} \times \frac{5}{7} =$$

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

$$\frac{2}{3} \times \frac{2}{9} =$$

$$\frac{6}{10} \times \frac{2}{8} =$$

Simple Fraction Division 3
Version 2

Name: _____

Solve the fraction problem and reduce the answer to simplest form.

$$\frac{2}{4} \div \frac{3}{7} =$$

$$\frac{6}{8} \div \frac{2}{3} =$$

$$\frac{7}{10} \div \frac{2}{3} =$$

$$\frac{4}{7} \div \frac{2}{3} =$$

$$\frac{6}{7} \div \frac{3}{8} =$$

$$\frac{7}{9} \div \frac{2}{5} =$$

$$\frac{5}{6} \div \frac{6}{10} =$$

$$\frac{6}{7} \div \frac{4}{6} =$$

$$\frac{5}{6} \div \frac{2}{3} =$$

$$\frac{2}{7} \div \frac{3}{4} =$$