

Multiplying Fractions Lesson & Practice

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Instructions: Use the lesson video (<https://youtu.be/hdSaaETKDCc?si=hKwDGRS1bC2UR3nC>) to complete the following notes. After you have filled out the notes, complete the practice questions.

Notes

When multiplying fractions, you multiply the numerators and multiply the denominators. For each of the following examples, multiply the fractions and make sure your final answer is simplified.

Example 1:

$$\frac{1}{4} \times \frac{3}{5}$$

$$= \frac{1 \times 3}{4 \times 5}$$

$$= \frac{3}{20}$$

Example 2:

$$\frac{3}{4} \times \frac{5}{6}$$

$$= \frac{3 \times 5}{4 \times 6}$$

$$= \frac{15 \div 3}{24 \div 3}$$

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

OR reduce first

$$\frac{\cancel{3}^1}{4} \times \frac{5}{\cancel{6}_2}$$

$$= \frac{1 \times 5}{4 \times 2}$$

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

Example 3:

$$4 \times \frac{3}{8}$$

$$= \frac{4}{1} \times \frac{3}{8}$$

$$= \frac{4 \times 3}{1 \times 8}$$

$$= \frac{12 \div 4}{8 \div 4}$$

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

OR reduce first

$$\cancel{4}^1 \times \frac{3}{\cancel{8}_2}$$

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

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

Practice

Evaluate each of the following. Make sure your final answer is simplified.

$$\begin{aligned} 1) \frac{-5}{4} \times \frac{1}{3} \\ = \frac{-5}{12} \end{aligned}$$

$$\begin{aligned} 2) \frac{8}{7} \times \frac{7}{10} \\ = \frac{4 \times 1}{1 \times 5} \\ = \frac{4}{5} \end{aligned}$$

$$\begin{aligned} 3) \frac{4}{9} \times \frac{7}{4} \\ = \frac{1 \times 7}{9 \times 1} \\ = \frac{7}{9} \end{aligned}$$

$$\begin{aligned} 4) \frac{-2}{3} \times \frac{5}{2} \\ = \frac{-1 \times 5}{3 \times 2} \\ = \frac{-5}{6} \end{aligned}$$

$$\begin{aligned} 5) -2 \times \frac{3}{7} \\ = \frac{-2}{1} \times \frac{3}{7} \\ = \frac{-2 \times 3}{1 \times 7} \\ = \frac{-6}{7} \end{aligned}$$

$$\begin{aligned} 6) \frac{10}{3} \times \frac{4}{5} \\ = \frac{2 \times 4}{3 \times 1} \\ = \frac{8}{3} \end{aligned}$$

$$\begin{aligned} 7) \frac{1}{5} \times -15 \\ = \frac{1}{1} \times -3 \\ = 1 \times -3 \\ = -3 \end{aligned}$$

$$\begin{aligned} 8) \frac{10}{7} \times \frac{1}{14} \\ = \frac{5 \times 1}{7 \times 7} \\ = \frac{5}{49} \end{aligned}$$

$$\begin{aligned} 9) -\frac{4}{3} \times \frac{3}{2} \\ = \frac{-2 \times 1}{1 \times 1} \\ = \frac{-2}{1} \\ = -2 \end{aligned}$$

$$\begin{aligned} 10) \frac{9}{5} \times \frac{11}{18} \\ = \frac{1 \times 11}{5 \times 2} \\ = \frac{11}{10} \end{aligned}$$

$$\begin{aligned} 11) -\frac{12}{5} \times \frac{3}{20} \\ = \frac{-1 \times 3}{5 \times 10} \\ = \frac{-3}{50} \end{aligned}$$

$$\begin{aligned} 12) \frac{-2}{9} \times 2 \\ = \frac{-2}{9} \times \frac{2}{1} \\ = \frac{-2 \times 2}{9 \times 1} \\ = \frac{-4}{9} \end{aligned}$$