

Multiplying Rational Numbers

1. Evaluate each expression. Write your answers in lowest terms.

a) $\frac{3}{4} \times \frac{8}{3} \times 1\frac{1}{4}$ b) $\frac{5}{8} \times \frac{3}{5}$ c) $\frac{1}{2} \times \frac{4}{5}$ d) $3 \times \frac{2}{3}$
e) $\frac{2}{3} \times 9$ f) $\frac{3}{8} \times 1\frac{1}{4}$ g) $\frac{7}{9} \times 2\frac{1}{4}$ h) $\frac{5}{8} \times \frac{1}{4} \times \frac{8}{9}$
i) $\frac{2}{3} \times \frac{3}{4} \times \frac{4}{5}$ j) $\frac{5}{8} \times \frac{3}{7} \times 2\frac{4}{5}$

2. Evaluate each expression. Write your answers in lowest terms. Watch the signs!

a) $\frac{3}{8} \times \left(-\frac{5}{8}\right)$ b) $-\frac{2}{3} \times \frac{6}{7}$ c) $-\frac{1}{3} \times \left(-\frac{6}{5}\right)$ d) $\frac{3}{5} \times \left(-\frac{5}{9}\right)$
e) $4 \times \left(-\frac{3}{4}\right)$ f) $-\frac{2}{3} \times (-6)$ g) $1\frac{1}{2} \times \left(-\frac{2}{5}\right)$ h) $-2\frac{1}{4} \times \left(-3\frac{1}{3}\right)$
i) $-\frac{2}{3} \times \frac{1}{2} \times \frac{-6}{5}$ j) $\left(-\frac{3}{4}\right) \times \left(-1\frac{1}{5}\right) \times \left(-\frac{5}{9}\right)$

Dividing Rational Numbers

1. Evaluate each expression. Write your answers in lowest terms.

a) $\frac{1}{6} \div 2\frac{2}{3}$ b) $\frac{1}{3} \div \frac{3}{5}$ c) $\frac{3}{10} \div \frac{3}{2}$ d) $\frac{5}{2} \div \frac{1}{2}$
e) $6 \div \frac{1}{2}$ f) $\frac{3}{5} \div 2$ g) $3 \div \frac{4}{5}$ h) $\frac{9}{8} \div 3$
i) $1\frac{1}{2} \div \frac{4}{9}$ j) $3\frac{3}{4} \div 4\frac{3}{8}$

2. Evaluate each expression. Write your answers in lowest terms. Watch the signs!

a) $\frac{5}{6} \div \left(-\frac{2}{3}\right)$ b) $-\frac{1}{2} \div \left(-\frac{3}{2}\right)$ c) $-\frac{3}{4} \div \frac{9}{4}$ d) $\left(-\frac{3}{8}\right) \div \frac{5}{4}$
e) $-\frac{4}{5} \div 4$ f) $-3 \div \left(-\frac{9}{4}\right)$ g) $\left(-1\frac{1}{2}\right) \div 2\frac{3}{4}$ h) $-1\frac{2}{3} \div \left(-2\frac{1}{5}\right)$
i) $-\frac{2}{3} \div \frac{-6}{5}$ j) $\left(-1\frac{3}{4}\right) \div \left(-1\frac{1}{5}\right) \div \left(-\frac{5}{9}\right)$

Answers to Multiplying. 1a) $\frac{5}{2}$ b) $\frac{3}{8}$ c) $\frac{2}{5}$ d) 2 e) 6 f) $\frac{15}{32}$ g) $\frac{7}{4}$ h) $\frac{5}{36}$ i) $\frac{2}{5}$

j) $\frac{3}{4}$ 2.a) $-\frac{15}{64}$ b) $-\frac{4}{7}$ c) $\frac{2}{5}$ d) $-\frac{1}{3}$ e) -3 f) 4 g) $-\frac{3}{5}$ h) $\frac{15}{2}$ i) $\frac{2}{5}$ j) $-\frac{1}{2}$

Answers to Dividing. 1a) $\frac{1}{16}$ b) $\frac{5}{9}$ c) $\frac{1}{5}$ d) 5 e) 12 f) $\frac{3}{10}$ g) $\frac{15}{4}$ h) $\frac{3}{8}$ i) $\frac{27}{8}$

j) $\frac{6}{7}$ 2.a) $-\frac{5}{4}$ b) $\frac{1}{3}$ c) $-\frac{1}{3}$ d) $-\frac{3}{10}$ e) $-\frac{1}{5}$ f) $\frac{4}{3}$ g) $-\frac{6}{11}$ h) $\frac{25}{33}$ i) $\frac{5}{9}$ j) $-\frac{21}{8}$