Multiplication and Division: Q

EXAMPLE 1

Calculate.

$$\frac{1}{2} \times \left(-\frac{8}{9}\right) \div \frac{2}{3}$$

$$= \frac{1}{2} \times \left(-\frac{8}{9}\right) \times \frac{3}{2}$$

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

EXAMPLE 2

Calculate.

$$-1\frac{1}{9} \div 2\frac{7}{8} \times \left(-5\frac{3}{4}\right)$$

$$= \left(-\frac{10}{9}\right) \div \frac{23}{8} \times \left(-\frac{23}{4}\right)$$

$$= \left(-\frac{10}{9}\right) \times \frac{8}{23} \times \left(-\frac{23}{4}\right)$$

$$= \frac{20}{9}$$

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

1. Calculate.

a. $-\frac{5}{8} \times \frac{16}{21} \times \left(-\frac{7}{15}\right)$

b. $(-9)\left(\frac{2}{3}\right) \div \left(\frac{18}{25}\right)\left(-\frac{3}{5}\right)$

c. $\frac{4}{5} \times \left(-\frac{3}{4}\right) \div \frac{7}{8} \times \left(\frac{15}{16}\right)$

d. $\left(-\frac{2}{3}\right) \div \frac{3}{4} \times \left(-\frac{2}{5}\right) \div \frac{8}{9}$

e. $(-2)\left(\frac{5}{6}\right) \div \left(\frac{-2}{3}\right)\left(\frac{-4}{9}\right)$

f. $\frac{4}{7} \div \left(\frac{-2}{5}\right)\left(\frac{-7}{8}\right) \div \left(\frac{-1}{2}\right)$

2. Calculate.

a. $\left(-2\frac{3}{4}\right) \div \left(-1\frac{1}{4}\right) \times \frac{9}{16} \div \frac{3}{8}$

b. $\left(-3\frac{4}{7}\right) \times \left(-\frac{20}{29}\right) \div 1\frac{1}{14} \times \left(-2\frac{9}{10}\right)$

c. $3\frac{1}{8} \times \left(-1\frac{1}{3}\right) \div 2\frac{2}{9} \times \left(-3\frac{1}{5}\right)$

d. $\left(-3\frac{1}{2}\right) \div 7 \div 1\frac{1}{9} \div \left(-1\frac{1}{8}\right)$

e. $1\frac{4}{7} \div 7\frac{1}{3} \div 2\frac{21}{50} \div \left(-1\frac{23}{77}\right)$

f. $\left(-1\frac{1}{4}\right) \div 1\frac{1}{9} \times 8 \div \left(-7\frac{1}{2}\right)$

3. Find the product when the quotient of $5\frac{1}{4}$ and $3\frac{1}{2}$ is multiplied by $1\frac{1}{3}$.

4. Find the answer when the product of $-\frac{7}{8}$ and $\frac{4}{21}$ is divided by the quotient of $\frac{5}{8}$ and $-1\frac{1}{4}$.

5. Divide the quotient of $-\frac{5}{6}$ and $\frac{2}{3}$ by the product of $-\frac{1}{2}$ and $\frac{4}{5}$.

6. Find the answer when the quotient of $-5\frac{2}{5}$ and $1\frac{4}{5}$ is tripled and then divided by -27.

7. Calculate.

a. $\dfrac{\frac{5}{8} \times \left(\frac{4}{15}\right)}{\left(-\frac{3}{7}\right) \div \frac{12}{21}}$

b. $\dfrac{-1\frac{1}{3} \div 4}{8 \div \left(-\frac{2}{3}\right)}$