

Name: Class:

Divide fractions and mixed numbers

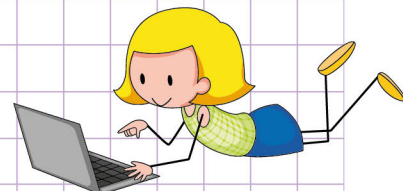


Divide.

a. $\frac{3}{7} \div 2\frac{5}{6}$

b. $\frac{5}{8} \div 3\frac{2}{5}$

c. $\frac{24}{1} \div 4\frac{1}{2}$



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Divide fractions and mixed numbers.



Divide.

a. $\frac{3}{7} \div 2\frac{5}{6}$ convert the mixed number into an improper fraction.

$$2\frac{5}{6} = \frac{(2 \times 6) + 5}{6} = \frac{17}{6}$$

$$\frac{3}{7} \div 2\frac{5}{6} = \frac{3}{7} \div \frac{17}{6}$$

flip the divisor. $\frac{17}{6} \rightarrow \frac{6}{17}$

change the division sign to multiplication sign, then multiply.

$$\frac{3}{7} \div 2\frac{5}{6} = \frac{3}{7} \div \frac{17}{6} = \frac{3}{7} \times \frac{6}{17} = \frac{3 \times 6}{7 \times 17} = \frac{18}{119}$$

Therefore, $\frac{3}{7} \div 2\frac{5}{6} = \frac{18}{119}$

b. $\frac{5}{8} \div 3\frac{2}{5}$ convert the mixed number into an improper fraction.

$$3\frac{2}{5} = \frac{(3 \times 5) + 2}{5} = \frac{17}{5}$$

flip the divisor. $\frac{17}{5} \rightarrow \frac{5}{17}$

$$\frac{5}{8} \div 3\frac{2}{5} = \frac{5}{8} \times \frac{5}{17} = \frac{5 \times 5}{8 \times 17} = \frac{25}{136}$$

Therefore, $\frac{5}{8} \div 3\frac{2}{5} = \frac{25}{136}$

c. $\frac{24}{1} \div 4\frac{1}{2}$ convert the mixed number into an improper fraction.

$$4\frac{1}{2} = \frac{(4 \times 2) + 1}{2} = \frac{9}{2}$$

flip the divisor. $\frac{9}{2} \rightarrow \frac{2}{9}$

$$\frac{24}{1} \div 4\frac{1}{2} = \frac{24}{1} \times \frac{2}{9} = \frac{24 \times 2}{1 \times 9} = \frac{48}{9} = 5\frac{1}{3}$$

Therefore, $\frac{24}{1} \div 4\frac{1}{2} = 5\frac{1}{3}$

