

Name: _____

Dividing Fractions and Mixed Numbers

Example:

$$2\frac{2}{3} \div 1\frac{1}{2} = \frac{8}{3} \div \frac{3}{2}$$

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

Dividing by a number is the same as multiplying by its reciprocal.

↑ reciprocals ↓

$$\frac{8}{3} \times \frac{2}{3} = \frac{16}{9} = 1\frac{7}{9}$$

a. $4\frac{1}{3} \div 1\frac{1}{3}$

b. $5\frac{5}{6} \div \frac{2}{3}$

c. $2\frac{3}{4} \div \frac{1}{2}$

d. $1\frac{6}{7} \div 2\frac{3}{4}$

e. $8 \div \frac{3}{4}$

f. $5\frac{4}{5} \div \frac{7}{8}$

g. $12 \div \frac{3}{8}$

h. $4\frac{1}{2} \div 1\frac{4}{5}$

i. $3\frac{7}{8} \div \frac{6}{7}$

ANSWER KEY

Dividing Fractions and Mixed Numbers

Example:

$$2\frac{2}{3} \div 1\frac{1}{2} = \frac{8}{3} \div \frac{3}{2}$$

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

Dividing by a number is the same as multiplying by its reciprocal.

↑ reciprocals ↓

$$\frac{8}{3} \times \frac{2}{3} = \frac{16}{9} = 1\frac{7}{9}$$

a. $4\frac{1}{3} \div 1\frac{1}{3}$

$$\frac{13}{3} \div \frac{4}{3} = \frac{13}{3} \times \frac{3}{4}$$

$$\frac{13}{3} \times \frac{3}{4} = \frac{39}{12} = 3\frac{3}{12} = 3\frac{1}{4}$$

b. $5\frac{5}{6} \div \frac{2}{3}$

$$\frac{35}{6} \div \frac{2}{3} = \frac{35}{6} \times \frac{3}{2}$$

$$\frac{35}{6} \times \frac{3}{2} = \frac{105}{12} = 8\frac{9}{12} = 8\frac{3}{4}$$

c. $2\frac{3}{4} \div \frac{1}{2}$

$$\frac{11}{4} \div \frac{1}{2} = \frac{11}{4} \times \frac{2}{1}$$

$$\frac{11}{4} \times \frac{2}{1} = \frac{22}{4} = 5\frac{2}{4} = 5\frac{1}{2}$$

d. $1\frac{6}{7} \div 2\frac{3}{4}$

$$\frac{13}{7} \div \frac{11}{4} = \frac{13}{7} \times \frac{4}{11}$$

$$\frac{13}{7} \times \frac{4}{11} = \frac{52}{77}$$

e. $8 \div \frac{3}{4}$

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

$$\frac{8}{1} \times \frac{4}{3} = \frac{32}{3} = 10\frac{2}{3}$$

f. $5\frac{4}{5} \div \frac{7}{8}$

$$\frac{29}{5} \div \frac{7}{8} = \frac{29}{5} \times \frac{8}{7}$$

$$\frac{29}{5} \times \frac{8}{7} = \frac{232}{35} = 6\frac{22}{35}$$

g. $12 \div \frac{3}{8}$

$$\frac{12}{1} \div \frac{3}{8} = \frac{12}{1} \times \frac{8}{3}$$

$$\frac{12}{1} \times \frac{8}{3} = \frac{96}{3} = 32$$

h. $4\frac{1}{2} \div 1\frac{4}{5}$

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

$$\frac{9}{2} \times \frac{5}{9} = \frac{45}{18} = 2\frac{9}{18} = 2\frac{1}{2}$$

i. $3\frac{7}{8} \div \frac{6}{7}$

$$\frac{31}{8} \div \frac{6}{7} = \frac{31}{8} \times \frac{7}{6}$$

$$\frac{31}{8} \times \frac{7}{6} = \frac{217}{48} = 4\frac{25}{48}$$