

Dividing Fractions

Date _____ Period _____

Divide.

1) $\frac{9}{2} \div \frac{3}{1}$

2) $\frac{1}{2} \div \frac{4}{1}$

3) $\frac{5}{1} \div \frac{2}{3}$

4) $\frac{4}{7} \div \frac{4}{1}$

5) $\frac{8}{1} \div \frac{5}{8}$

6) $\frac{3}{1} \div \frac{7}{3}$

7) $\frac{1}{2} \div \frac{3}{1}$

8) $\frac{1}{8} \div \frac{5}{1}$

9) $\frac{7}{1} \div \frac{2}{3}$

Dividing Fractions

Date _____ Period _____

Divide.

1) $\frac{9}{2} \div \frac{3}{1}$

Answer: $1\frac{1}{2}$

2) $\frac{1}{2} \div \frac{4}{1}$

Answer: $\frac{1}{8}$

3) $\frac{5}{1} \div \frac{2}{3}$

Answer: $7\frac{1}{2}$

4) $\frac{4}{7} \div \frac{4}{1}$

Answer: $\frac{1}{7}$

5) $\frac{8}{1} \div \frac{5}{8}$

Answer: $12\frac{4}{5}$

6) $\frac{3}{1} \div \frac{7}{3}$

Answer: $1\frac{2}{7}$

7) $\frac{1}{2} \div \frac{3}{1}$

Answer: $\frac{1}{6}$

8) $\frac{1}{8} \div \frac{5}{1}$

Answer: $\frac{1}{40}$

9) $\frac{7}{1} \div \frac{2}{3}$

Answer: $10\frac{1}{2}$

Solution Steps

1) $\frac{9}{2} \div \frac{3}{1}$

Dividing fractions is the same as multiplying by the reciprocal

The reciprocal of the $\frac{1}{3}$

second fraction is $\frac{3}{1}$

$$\frac{9}{2} / \frac{3}{1} = \frac{9}{2} * \frac{1}{3}$$

$$\frac{2 * 3}{9 * 1}$$

$$\frac{9 * 1}{2 * 3}$$

$$\frac{9^1 * 1}{2 * 3^1}$$

$$\frac{1}{2}$$

$$1 \frac{1}{2}$$

4) $\frac{4}{7} \div \frac{4}{1}$

Dividing fractions is the same as multiplying by the reciprocal

The reciprocal of the $\frac{1}{4}$

second fraction is $\frac{4}{1}$

$$\frac{4}{7} / \frac{4}{1} = \frac{4}{7} * \frac{1}{4}$$

$$\frac{7 * 4}{4 * 1}$$

$$\frac{4 * 1}{7 * 4}$$

$$\frac{4^1 * 1}{7 * 4^1}$$

$$\frac{1}{7}$$

$$\frac{1}{7}$$

2) $\frac{1}{2} \div \frac{4}{1}$

Dividing fractions is the same as multiplying by the reciprocal

The reciprocal of the $\frac{1}{4}$

second fraction is $\frac{4}{1}$

$$\frac{1}{2} / \frac{4}{1} = \frac{1}{2} * \frac{1}{4}$$

$$\frac{2 * 4}{1 * 1}$$

$$\frac{1 * 1}{2 * 4}$$

$$\frac{1}{8}$$

$$\frac{1}{8}$$

5) $\frac{8}{1} \div \frac{5}{8}$

Dividing fractions is the same as multiplying by the reciprocal

The reciprocal of the $\frac{8}{5}$

second fraction is $\frac{5}{8}$

$$\frac{8}{1} / \frac{5}{8} = \frac{8}{1} * \frac{8}{5}$$

$$\frac{1 * 5}{8 * 8}$$

$$\frac{1 * 8}{8 * 5}$$

$$\frac{4}{5}$$

$$12 \frac{4}{5}$$

3) $\frac{5}{1} \div \frac{2}{3}$

Dividing fractions is the same as multiplying by the reciprocal

The reciprocal of the $\frac{3}{2}$

second fraction is $\frac{2}{3}$

$$\frac{5}{1} / \frac{2}{3} = \frac{5}{1} * \frac{3}{2}$$

$$\frac{1 * 2}{5 * 3}$$

$$\frac{1 * 3}{5 * 2}$$

$$\frac{1}{7}$$

$$7 \frac{1}{2}$$

6) $\frac{3}{1} \div \frac{7}{3}$

Dividing fractions is the same as multiplying by the reciprocal

The reciprocal of the $\frac{3}{7}$

second fraction is $\frac{7}{3}$

$$\frac{3}{1} / \frac{7}{3} = \frac{3}{1} * \frac{3}{7}$$

$$\frac{1 * 7}{3 * 3}$$

$$\frac{1 * 3}{3 * 7}$$

$$\frac{2}{7}$$

$$1 \frac{2}{7}$$

$$7) \frac{1}{2} \div \frac{3}{1}$$

Dividing fractions is the same as multiplying by the reciprocal

The reciprocal of the $\frac{1}{3}$ second fraction is $\frac{3}{1}$

$$\frac{1}{2} / \frac{3}{1} = \frac{1}{2} * \frac{1}{3}$$

$$\frac{2 * 3}{(1 * 1)} \\ \frac{1}{(2 * 3)} \\ \frac{1}{6}$$

$$8) \frac{1}{8} \div \frac{5}{1}$$

Dividing fractions is the same as multiplying by the reciprocal

The reciprocal of the $\frac{1}{5}$ second fraction is $\frac{5}{1}$

$$\frac{1}{8} / \frac{5}{1} = \frac{1}{8} * \frac{1}{5}$$

$$\frac{8 * 5}{(1 * 1)} \\ \frac{1}{(8 * 5)} \\ \frac{1}{40}$$

$$9) \frac{7}{1} \div \frac{2}{3}$$

Dividing fractions is the same as multiplying by the reciprocal

The reciprocal of the $\frac{3}{2}$ second fraction is $\frac{2}{3}$

$$\frac{7}{1} / \frac{2}{3} = \frac{7}{1} * \frac{3}{2}$$

$$\frac{1 * 2}{(7 * 3)} \\ \frac{1}{(1 * 2)} \\ 10 \frac{1}{2}$$