Dividing Fractions

Divide.

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

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

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

4)
$$\frac{6}{1} \div \frac{4}{7}$$

5)
$$\frac{8}{3} \div \frac{6}{1}$$

$$6) \ \frac{3}{1} \div \frac{3}{2}$$

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

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

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

Dividing Fractions

Divide.

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

Answer: $\frac{3}{14}$

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

Answer: $\frac{7}{27}$

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

Answer: $4\frac{2}{3}$

4)
$$\frac{6}{1} \div \frac{4}{7}$$

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

5)
$$\frac{8}{3} \div \frac{6}{1}$$

Answer: $\frac{4}{9}$

6)
$$\frac{3}{1} \div \frac{3}{2}$$

Answer: 2

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

Answer: $2\frac{1}{3}$

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

Answer: $\frac{1}{3}$

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

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

Solution Steps

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

Dividing fractions is the same as multiplying by the reciprocal

The reciprocal of the

second fraction is $\overline{7}$

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

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

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

$$\frac{3}{14}$$

4)
$$\frac{6}{1} \div \frac{4}{7}$$

Dividing fractions is the same as multiplying by the reciprocal

The reciprocal of the

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

$$\frac{6}{1} / \frac{4}{7} = \frac{6}{1} * \frac{7}{4}$$

$$\frac{6}{7} * \frac{7}{4}$$

$$\frac{(6 * 7)}{(1 * 4)}$$

$$\frac{(6^{3} * 7)}{(1 * 4^{2})}$$

$$\frac{1}{10 \cdot 2}$$

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

Dividing fractions is the same as multiplying by the reciprocal

The reciprocal of the

second fraction is $\overline{3}$ 7 3 7 1

$$\frac{\frac{7}{9}}{\frac{7}{1}} = \frac{7}{9} * \frac{1}{3}$$

$$\frac{\frac{7}{9} * \frac{1}{3}}{\frac{(7 * 1)}{(9 * 3)}}$$

$$\frac{7}{27}$$

5)
$$\frac{8}{3} \div \frac{6}{1}$$

Dividing fractions is the same as multiplying by the reciprocal

The reciprocal of the

second fraction is $\overline{6}$

$$\frac{8}{3} / \frac{6}{1} = \frac{8}{3} * \frac{1}{6}$$

$$\frac{8}{3} * \frac{1}{6}$$

$$\frac{(8 * 1)}{(3 * 6)}$$

$$\frac{(8^{4} * 1)}{(3 * 6^{3})}$$

$$\frac{4}{6}$$

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

Dividing fractions is the same as multiplying by the reciprocal

The reciprocal of the

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

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

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

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

$$\frac{2}{4\frac{3}{3}}$$

6)
$$\frac{3}{1} \div \frac{3}{2}$$

Dividing fractions is the same as multiplying by the reciprocal

The reciprocal of the

second fraction is $\overline{3}$

$$\frac{3}{1}, \frac{3}{2} = \frac{3}{1} \cdot \frac{2}{3}$$

$$\frac{1}{1} \cdot \frac{3}{3}$$

$$\frac{(3 \cdot 2)}{(1 \cdot 3)}$$

$$\frac{(3^{1} \cdot 2)}{(1 \cdot 3^{1})}$$

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

Dividing fractions is the same as multiplying by the reciprocal

The reciprocal of the

second fraction is
$$\overline{9}$$

$$\frac{3}{1}, \frac{9}{7} = \frac{3}{1}, \frac{7}{9}$$

$$\frac{3}{1}, \frac{7}{7} = \frac{1}{1}, \frac{7}{9}$$

$$\frac{3}{1}, \frac{7}{9}$$

$$\frac{(3 * 7)}{(1 * 9)}$$

$$\frac{(3^{1} * 7)}{(1 * 9^{3})}$$

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

Dividing fractions is the same as multiplying by the reciprocal

The reciprocal of the $\stackrel{\cdot}{1}$ second fraction is $\overline{2}$

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

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

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

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

Dividing fractions is the same as multiplying by the reciprocal

The reciprocal of the

second fraction is $\overline{7}$

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

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

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

$$\frac{\overline{2} * \overline{7}}{(7 * 1)}$$

$$\frac{(2*7)}{(2*7)}$$

$$\frac{(7^1 * 1)}{(2 * 7^1)}$$