

$$\frac{2}{7} - \frac{3}{8} + \frac{1}{4} = \frac{16}{56} - \frac{21}{56} + \frac{14}{56} = \frac{9}{56}$$

$$\boxed{\frac{9}{56}}$$

$$\frac{-5}{x} = \frac{10}{-12} \implies \frac{-5}{x} = \frac{-5}{6} \implies x = 6$$

$$\boxed{6}$$

The rational number that is its own additive inverse is 0, because $0 + 0 = 0$.

$$\boxed{0}$$

$$\left(\frac{-3}{4}\right)^2 = \frac{9}{16}$$

$$\boxed{\frac{9}{16}}$$

The associative property of addition is represented by:

$$(a + b) + c = a + (b + c)$$

$$\boxed{(a + b) + c = a + (b + c)}$$

$$\frac{-12}{13} = \frac{-12 \times 4}{13 \times 4} = \frac{-48}{52}$$

$$\boxed{\frac{-48}{52}}$$

The reciprocal of a negative rational number is negative.

Negative

$$x + \frac{1}{2} = \frac{-1}{3} \implies x = \frac{-1}{3} - \frac{1}{2} = \frac{-2}{6} - \frac{3}{6} = \frac{-5}{6}$$

$$\boxed{\frac{-5}{6}}$$

The midpoint between $\frac{2}{3}$ and $\frac{3}{4}$ is:

$$\frac{\frac{2}{3} + \frac{3}{4}}{2} = \frac{\frac{8}{12} + \frac{9}{12}}{2} = \frac{\frac{17}{12}}{2} = \frac{17}{24}$$

$$\boxed{\frac{17}{24}}$$

$$\frac{1}{2} \div \left(\frac{1}{3} \div \frac{1}{4} \right) = \frac{1}{2} \div \left(\frac{1}{3} \times \frac{4}{1} \right) = \frac{1}{2} \div \frac{4}{3} = \frac{1}{2} \times \frac{3}{4} = \frac{3}{8}$$

$$\boxed{\frac{3}{8}}$$

If P is a rational number, then:

$$P \times 0 = 0$$

$$\boxed{0}$$

The standard form of $\frac{18}{-45}$ is:

$$\frac{18}{-45} = \frac{2}{-5} = \frac{-2}{5}$$

$$\boxed{\frac{-2}{5}}$$

Comparing $\frac{-7}{9}$ and $\frac{-5}{8}$:

$$\frac{-7}{9} \approx -0.777, \quad \frac{-5}{8} = -0.625$$

$$\boxed{\frac{-7}{9}}$$

Let the third rational number be x . Then:

$$\frac{1}{2} + \frac{3}{4} + x = \frac{15}{4} \implies \frac{2}{4} + \frac{3}{4} + x = \frac{15}{4} \implies \frac{5}{4} + x = \frac{15}{4} \implies x = \frac{10}{4}$$

$$\boxed{\frac{10}{4}}$$

$$x \times y = y \times x$$

This represents the commutative property.

Commutative property