

Anti-Quiz # 2 (there were 3 versions of this quiz)

Solve the equation: $\frac{5}{x+4} = \frac{3}{x-2}$

*Solution:**Multiply both sides of the equation by $(x+4)(x-2)$.*

$$5(x-2) = 3(x+4)$$

$$5x - 10 = 3x + 12$$

Subtract $3x$ from both sides.

$$2x - 10 = 12$$

Add 10.

$$2x = 22$$

Divide by 2.

$$\boxed{x = 11}$$

Solve the equation: $\frac{5}{x+2} = \frac{3}{x-4}$

*Solution:**Multiply both sides of the equation by $(x+2)(x-4)$.*

$$5(x-4) = 3(x+2)$$

$$5x - 20 = 3x + 6$$

Subtract $3x$ from both sides.

$$2x - 20 = 6$$

Add 20.

$$2x = 26$$

Divide by 2.

$$\boxed{x = 13}$$

Solve the equation: $\frac{5}{x-4} = \frac{3}{x+2}$

*Solution:**Multiply both sides of the equation by $(x-4)(x+2)$.*

$$5(x+2) = 3(x-4)$$

$$5x + 10 = 3x - 12$$

Subtract $3x$ from both sides.

$$2x + 10 = -12$$

Subtract 10.

$$2x = -22$$

Divide by 2.

$$\boxed{x = -11}$$