

## Solution

$$\frac{2}{3} + \frac{2}{x-2} = 1 \quad : \quad x = 8$$

### Steps

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

Multiply by LCM

Show Steps +

$$2x + 2 = 3x - 6$$

Subtract 2 from both sides

$$2x + 2 - 2 = 3x - 6 - 2$$

Simplify

$$2x = 3x - 8$$

Subtract  $3x$  from both sides

$$2x - 3x = 3x - 8 - 3x$$

Simplify

$$-x = -8$$

Divide both sides by  $-1$

$$\frac{-x}{-1} = \frac{-8}{-1}$$

Simplify

$$x = 8$$

Verify Solutions

Find undefined (singularity) points:  $x = 2$

Show Steps +

Combine undefined points with solutions:

$$x = 8$$

## Graph

Plotting:  $\frac{2}{3} + \frac{2}{x-2} - 1$

