

Solve each. Write the inequality in interval notation.

$$1) \quad \left| \frac{3x+1}{5} \right| \geq 2$$

$$2) \quad \frac{1}{3}x - 2\left(\frac{5}{9}x + 3\right) = \frac{1}{2}(3x - 1) + \frac{5}{6}$$

$$3) \quad \frac{5x}{x+2} + \frac{2}{x} = 5$$

$$4) \quad \frac{2x-5}{x-2} - 2 = \frac{3}{x+2}$$

$$5) \quad \frac{x}{x+1} + \frac{5}{x-1} = 1$$

$$6) \quad \frac{4}{x^2-8x+12} = \frac{x}{x-2} + \frac{1}{x-6}$$