

Rational Equations

Solve for x

$$\textcircled{1} \quad \frac{5}{8} - \frac{3}{5} = \frac{x}{6}$$

$$\textcircled{2} \quad \frac{1}{8} + \frac{1}{2} = \frac{1}{x}$$

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

$$\textcircled{4} \quad \frac{x}{6} - \frac{8}{x} = 0$$

$$\textcircled{5} \quad \frac{5}{3x} + \frac{3}{x} = 1$$

$$\textcircled{6} \quad \frac{x+2}{x-6} = \frac{1}{2}$$

$$\textcircled{7} \quad x + \frac{12}{x} = -7$$

$$\textcircled{8} \quad \frac{3}{x-4} = \frac{5}{x+1}$$

$$\textcircled{9} \quad \frac{x+1}{3} - 1 = \frac{x-1}{2}$$

$$\textcircled{10} \quad \frac{5}{x-2} + \frac{3x}{x-2} = \frac{4}{x^2 - 4x + 4}$$

$$\textcircled{11} \quad \frac{x}{2} = \frac{1}{x-8}$$

$$(12) \quad \frac{4x+3}{4} - \frac{2x}{x+1} = x$$

$$(13) \quad \frac{3}{x-2} + \frac{1}{x+2} = \frac{12}{x^2-4}$$

$$(14) \quad \frac{2}{x-3} - \frac{3}{x+3} = \frac{12}{x^2-9}$$

$$(15) \quad \frac{2x+1}{x-2} + \frac{3}{x} = \frac{-6}{x^2-2x}$$

$$(16) \quad \frac{5}{x^2} - \frac{43}{x} = 18$$

$$(17) \quad \frac{7}{x^2} + \frac{19}{x} = 6$$

$$(18) \quad 2 = \frac{3}{2x-1} + \frac{-1}{(2x-1)^2}$$

$$(19) \quad 6 = \frac{7}{2x-3} + \frac{3}{(2x-3)^2}$$

$$(20) \quad -\frac{3x}{2} + \frac{9x-5}{3} = \frac{11x+8}{6x}$$