

Section 6.6: Solving Rational Equations

- Objectives:
- * Solve rational equations containing constant denominators.
 - * Solve rational equations containing variable denominators.

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

① EXAMPLES

a) $\frac{1}{3} + \frac{x}{10} = -1$

b) $\frac{3}{2x} + \frac{1}{5x} = 6$

② EXAMPLES

a)
$$\frac{3x}{x-2} + \frac{4}{x^2-4} = -1$$

b)
$$\frac{3x}{x+5} = 8 - \frac{15}{x+5}$$

③ EXAMPLES

a)
$$\frac{2}{x^2+2x-8} - \frac{1}{x^2+9x+20} = \frac{4}{x^2+3x-10}$$

b)
$$\frac{12}{x+5} + \frac{5}{x} = \frac{20}{x}$$