

$$\textcircled{7} \quad \frac{\frac{7}{2x^2}}{2 \cdot x \cdot x} - \frac{4}{3x} \cdot \frac{2x}{2x} = \frac{21}{6x^2} - \frac{8x}{6x^2} = \frac{21-8x}{6x^2} \quad \text{when } x \neq 0$$

$$\textcircled{8} \quad \frac{7}{x^2-5x-24} + \frac{3}{x-8} \cdot \left(\frac{x+3}{x+3}\right)$$

$$\frac{7}{(x-8)(x+3)} + \frac{3x+9}{(x-8)(x+3)} = \frac{3x+16}{(x-8)(x+3)} = \frac{3x+16}{x^2-5x-24} \quad \text{when } x \neq 8, x \neq -3$$

$$\textcircled{9} \quad \frac{7}{x-5} + \frac{4x}{x+1}$$

$$\frac{7}{x-5} \cdot \frac{(x+1)}{(x+1)} + \frac{4x}{x+1} \cdot \frac{(x-5)}{(x-5)}$$

$$\frac{7x+7}{(x-5)(x+1)} + \frac{4x^2-20x}{(x+1)(x-5)} = \frac{4x^2-13x+7}{x^2-4x-5} \quad \text{when } x \neq 5, x \neq -1$$

$$\textcircled{10} \quad \left(\frac{x^2}{\frac{4}{5} - \frac{4}{x}}\right) \left(\frac{5x}{5x}\right) = \frac{5x^3}{\frac{20x}{5} - \frac{20x}{x}} = \frac{5x^3}{4x-20} \quad \text{when } x \neq 0$$

$$\textcircled{11} \quad \left(\frac{\frac{x^2}{4}}{\frac{x}{x+4}}\right) \left(\frac{4(x+4)}{4(x+4)}\right) = \frac{x^2(x+4)}{4x} = \frac{x(x+4)}{4} = \frac{x^2+4x}{4} \quad \text{when } x \neq -4, x \neq 0$$