

3.	$\frac{5}{x}$	$\frac{15}{4x} + \frac{5}{4x} = \frac{15+5}{4x} = \frac{20}{4x} = \frac{5}{x}$
5.	$\frac{9-2x}{x+1}$	$\frac{9}{x+1} - \frac{2x}{x+1} = \frac{9-2x}{x+1}$
7.	5	$\frac{5x}{x+3} + \frac{15}{x+3} = \frac{5x+15}{x+3} = \frac{5(x+3)}{x+5} = 5$
9.	$3x(x-2)$	$3x, 3(x-2)$ LCM = $3x(x-2)$
11.	$2x(x-5)$	$2x, 2x(x-5)$ LCM = $2x(x-5)$
13.	$x(x-5)(x+5)$	x $x-5$ $x^2 - 25 = (x+5)(x-5)$ LCM = $x(x+5)(x-5)$
15.	D	D; $3x^2 - 9x = 3x(x-3)$ $6x^2 = 2(3)(x^2)$ LCM = $6x^2(x-3)$
17.	$\frac{32-15x}{12x^2}$	$\begin{aligned}\frac{8}{3x^2} - \frac{5}{4x} &= \frac{8}{3x^2} \cdot \frac{4}{4} - \frac{5}{4x} \cdot \frac{3x}{3x} \\ &= \frac{32}{12x^2} - \frac{15x}{12x^2} = \frac{32-15x}{12x^2}\end{aligned}$

	$\frac{12}{x^2 + 5x - 24} + \frac{3}{x - 3} = \frac{12}{(x + 8)(x - 3)} + \frac{3}{x - 3}$ $= \frac{12}{(x + 8)(x - 3)} + \frac{3}{x - 3} \cdot \frac{x + 8}{x + 8}$ $= \frac{12}{(x + 8)(x - 3)} + \frac{3x + 24}{(x + 8)(x - 3)}$ $= \frac{3x + 36}{(x + 8)(x - 3)} = \frac{3(x + 12)}{(x + 8)(x - 3)}$
19.	$\frac{3(x + 12)}{(x + 8)(x - 3)}$ $\frac{9}{x - 3} + \frac{2x}{x + 1} = \frac{9}{x - 3} \cdot \frac{x + 1}{x + 1} + \frac{2x}{x + 1} \cdot \frac{x - 3}{x - 3}$ $= \frac{9x + 9}{(x - 3)(x + 1)} + \frac{2x^2 - 6x}{(x - 3)(x + 1)}$ $= \frac{2x^2 + 3x + 9}{(x - 3)(x + 1)}$
21.	$\frac{-15x}{x^2 - 8x + 16} + \frac{12}{x - 4} = \frac{-15x}{(x - 4)(x - 4)} + \frac{12}{x - 4}$ $= \frac{-15x}{(x - 4)(x - 4)} + \frac{12}{x - 4} \cdot \frac{x - 4}{x - 4}$ $= \frac{-15x}{(x - 4)(x - 4)} + \frac{12x - 48}{(x - 4)(x - 4)}$ $= \frac{-3x - 48}{(x - 4)^2}$ $= \frac{-3(x + 16)}{(x - 4)^2}$
23.	$\frac{-3(x + 16)}{(x - 4)^2}$

