

$$13. \frac{2x}{5x+20} + \frac{(6x)5}{(x+4)5}$$

$$\frac{2x + 25x}{5(x+4)} = \boxed{\frac{27x}{5(x+4)}}$$

$$14. \frac{(x-3)8}{(x-3)(x+7)} - \frac{5(x+7)}{(x-3)(x+7)}$$

$$8x-24-5x-35 = \boxed{\frac{3x-59}{(x-3)(x+7)}}$$

$$15. \frac{5(2x)}{5(x-2)} + \frac{x+9}{5(x-2)}$$

$$\frac{10x + x + 9}{5(x-2)} = \boxed{\frac{11x+9}{5(x-2)}}$$

$$16. \frac{(x-2)(x+2)}{(x+2)(x+2)} + \frac{x-2}{x^2+4x+4}$$

$$x^2-4+x-2 = \frac{x^2+x-6}{(x+2)(x+2)}$$

$$\boxed{\frac{(x+3)(x-2)}{(x+2)(x+2)}}$$

$$17. \frac{15x+2}{x^2+6x} - \frac{(x+1)x}{(x+6)x}$$

$$\frac{15x+2 - x^2 - x}{x(x+6)}$$

$$\boxed{\frac{-x^2+14x+2}{x(x+6)}}$$

$$18. \frac{(x+4)5}{(x+4)x+5} - \frac{(2x-5)}{x^2+9x+20}$$

$$5x+20-2x+5 = \boxed{\frac{3x+25}{(x+5)(x+4)}}$$

$$19. \frac{4 \cdot x}{4 \cdot 4} + \frac{(x-2)(x-4)}{8 \cdot 2 \cdot 16}$$

$$\frac{4x + 2x - 4 - x + 4}{16}$$

$$\boxed{\frac{5x}{16}}$$

$$20. \frac{4(4+3a)}{4 \cdot 6} - \frac{3(5a)}{8 \cdot 3} + \frac{(3-a)^2}{12 \cdot 2}$$

$$\frac{16 + 12a - 15a + 6 - 2a}{24}$$

$$= \boxed{\frac{-5a + 22}{24}}$$