

Name:

Adding and Subtracting Rational Expressions

$$\boxed{1} \quad \frac{8}{x-1} - \frac{4x}{2}$$

$$\boxed{2} \quad \frac{x-1}{x-1} + \frac{2x+9}{3x+4}$$

$$\boxed{3} \quad \frac{8}{2x^2} + \frac{3}{2x^2}$$

$$\boxed{4} \quad \frac{6x-12}{3x-6} - \frac{15x-6}{3x-6}$$

$$\boxed{5} \quad \frac{3}{x+6} - \frac{4}{x-8}$$

$$\boxed{6} \quad \frac{5}{8a} - \frac{2}{8a}$$

$$\boxed{7} \quad \frac{5y}{3y^2} - \frac{4}{3y^2}$$

$$\boxed{8} \quad \frac{3}{p-5} + \frac{6}{3p-8}$$

$$\boxed{9} \quad \frac{2}{m+8} + \frac{4}{m+2}$$

$$\boxed{10} \quad \frac{4l}{2l+3} + \frac{7}{2l+3}$$

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Answers

$$\boxed{1} \quad \frac{8}{x-1} - \frac{4x}{2}$$

$$= \frac{-4x^2 + 4x + 16}{2(x-1)}$$

$$\boxed{2} \quad \frac{x-1}{x-1} + \frac{2x+9}{3x+4}$$

$$= \frac{5x^2 + 8x - 13}{3x^2 + x - 4}$$

$$\boxed{3} \quad \frac{8}{2x^2} + \frac{3}{2x^2}$$

$$= \frac{11}{2x^2}$$

$$\boxed{4} \quad \frac{6x-12}{3x-6} - \frac{15x-6}{3x-6}$$

$$= \frac{-(9x+6)}{(3x-6)}$$

$$\boxed{5} \quad \frac{3}{x+6} - \frac{4}{x-8}$$

$$= \frac{-(x+48)}{x^2 - 2x - 48}$$

$$\boxed{6} \quad \frac{5}{8a} - \frac{2}{8a}$$

$$= \frac{3}{8a}$$

$$\boxed{7} \quad \frac{5y}{3y^2} - \frac{4}{3y^2}$$

$$= \frac{5y-4}{3y^2}$$

$$\boxed{8} \quad \frac{3}{p-5} + \frac{6}{3p-8}$$

$$= \frac{15p-54}{3p^2-23p+40}$$

$$\boxed{9} \quad \frac{2}{m+8} + \frac{4}{m+2}$$

$$= \frac{6(m+6)}{m^2+10m+16}$$

$$\boxed{10} \quad \frac{4l}{2l+3} + \frac{7}{2l+3}$$

$$= \frac{4l+7}{2l+3}$$