

Adding and Subtracting Rational Expressions

Simplify each expression.

$$1) \frac{5}{6ab} - \frac{7}{8a}$$

$$2) 3x - 5 - \frac{x-8}{x+4}$$

$$3) \frac{4}{a-3} + \frac{9}{a-5}$$

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

$$5) \frac{5}{2x-12} - \frac{20}{x^2-4x-12}$$

$$6) \frac{2-5m}{m-9} + \frac{4m-5}{9-m}$$

$$7) \frac{2p-3}{p^2-5p+6} - \frac{5}{p^2-9}$$

$$8) \frac{1}{5n} - \frac{3}{4} + \frac{7}{10n}$$

$$9) \frac{\frac{r+6}{r} - \frac{1}{r+2}}{\frac{r^2+4r+3}{r^2+r}}$$

$$10) \frac{n+5 - \frac{12}{n+1}}{\frac{n+9}{n+1} - \frac{5}{n}}$$

$$11) \frac{\frac{2}{x-y} + \frac{1}{x+y}}{\frac{1}{x-y}}$$

$$12) \frac{x - \frac{5x}{x+2}}{\frac{x-3}{x}}$$