

Review: Adding & Subtracting Rational Expressions

Simplify

$$1) \frac{5}{2a} + \frac{-3}{6a}$$

$$2) \frac{7}{3a} - \frac{3}{6a^2}$$

$$3) \frac{4a}{2a+6} + \frac{3}{a+3}$$

$$4) \frac{-3}{x-5} + \frac{-6}{x^2-5x}$$

$$5) \frac{2y}{y^2-25} + \frac{y+5}{y-5}$$

$$6) \frac{3a+2}{3a-6} - \frac{a+2}{a^2-4}$$

$$7) \frac{x}{2(x-3)} - \frac{x+1}{x-1}$$

$$8) \frac{1}{x^2+4x+3} + \frac{4}{x^2+3x+2}$$

$$9) \frac{3}{2x-6} - \frac{2}{x^2-6x+9}$$

$$10) \frac{x}{x^2-2x+1} - \frac{1}{x-1}$$

$$11) \frac{x^2+4x-5}{x^2-2x-3} + \frac{2}{x+1}$$

$$12) \frac{2w}{2w^2+w-1} - \frac{4}{2w^2+3w-2}$$

Answers:

$$1) \frac{2}{a}$$

$$2) \frac{14a-3}{6a^2}$$

$$3) \frac{2a+3}{a+3}$$

$$4) \frac{-3x-6}{x(x-5)}$$

(next page)

Answers:

$$5) \frac{y^2 + 12y + 25}{(y+5)(y-5)}$$

$$6) \frac{3a-1}{3(a-2)}$$

$$7) \frac{-x^2 + 3x + 6}{2(x-3)(x-1)}$$

$$8) \frac{5x+14}{(x+1)(x+2)(x+3)}$$

$$9) \frac{3x-13}{2(x-3)^2}$$

$$10) \frac{1}{x^2-2x+1}$$

$$11) \frac{x^2 + 6x - 11}{(x-3)(x+1)}$$

$$12) \frac{2w^2-4}{(2w-1)(w+1)(w+2)}$$