

Adding/Subtracting Rational Expressions Day 3

Find the sum or difference. Remember to SIMPLIFY at the end if possible!!!

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

2) $\frac{2}{x^2-6x+8} + \frac{3x}{4x}$

3) $\frac{3}{x+3} + \frac{2}{2x+1}$

4) $\frac{3}{x^2+7x+12} - \frac{3x}{2}$

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

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

7) $\frac{2}{x+1} + \frac{4x}{2x+4}$

8) $\frac{2}{x^2-2x-8} - \frac{3}{2}$

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

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

Answers to Adding/Subtracting Rational Expressions Day 3

$$1) \frac{8x + 10}{(x + 4)(3x + 1)}$$

$$2) \frac{32 + 3x^2 - 18x}{4(x - 4)(x - 2)}$$

$$3) \frac{8x + 9}{(x + 3)(2x + 1)}$$

$$4) \frac{6 - 3x^3 - 21x^2 - 36x}{2(x + 4)(x + 3)}$$

$$5) \frac{16x - 8 - x^2}{2(x - 4)(x + 1)}$$

$$6) \frac{x^2 + x + 12}{3x(x - 2)(x + 3)}$$

$$7) \frac{4x + 4 + 2x^2}{(x + 2)(x + 1)}$$

$$8) \frac{28 - 3x^2 + 6x}{2(x - 4)(x + 2)}$$

$$9) \frac{-2x - 18}{(x - 3)(x + 3)}$$

$$10) \frac{2x^2 + 2x + 4}{(x - 2)(x + 2)}$$