

SATPREP

Assignment: *Partial Fraction*

Find the partial fraction decomposition of each.

$$1) \frac{-5x + 23}{(x - 5)(x - 3)}$$

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

$$3) \frac{2x^3 - 25x^2 + 97x - 112}{x(x - 4)^2}$$

$$4) \frac{x^4 + 6x^2 + 11}{(x^2 + 4)^2}$$

$$5) \frac{10x^2 - 23x - 20}{(5x + 4)(x - 4)}$$

$$6) \frac{2x^3 - 16x^2 + 42x - 34}{(x - 4)(x - 3)^2}$$

$$7) \frac{2x^3 + 2x^2 - 17x - 11}{(2x + 3)(x - 2)^2}$$

$$8) \frac{2x^2 - 19 + 6x}{(2x - 3)(x^2 - 5)}$$

$$9) \frac{-x^2 + 8 + 4x}{(x + 1)(x + 2)}$$

$$10) \frac{10x^2 - 29x - 20}{(x - 3)(5x + 2)}$$

Answers to Assignment: Partial Fraction

$$1) -\frac{1}{x-5} - \frac{4}{x-3}$$

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

$$3) 2 - \frac{7}{x} - \frac{2}{x-4} + \frac{1}{(x-4)^2}$$

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

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

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

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

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

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

$$10) 2 - \frac{1}{x-3} + \frac{2}{5x+2}$$

