

Assignment

Date _____ Period _____

Find the partial fraction decomposition of each.

1) $\frac{-2x + 30}{x^2 - 5x}$

2) $\frac{-25x + 5 - 4x^2}{x^3 + 4x^2 - 5x}$

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

4) $\frac{-12x^2 + 23x + 15}{x^3 - 2x^2 - 3x}$

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

6) $\frac{5x^2 - 4x - 32}{x^3 - 16x}$

Answers to Assignment (ID: 1)

$$1) -\frac{6}{x} + \frac{4}{x-5}$$

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

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

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

$$5) \frac{2}{x-2} + \frac{2}{x+2} - \frac{8}{x+1}$$

$$6) \frac{2}{x} + \frac{1}{x-4} + \frac{2}{x+4}$$