SATPREP Name_____

Assignment :Partical Fraction (Advance)

Date_____

Find the partial fraction decomposition of each.

1) $\frac{6x^2 + 18}{x^4 + 8x^2 + 16}$

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

3) $\frac{-x^3 + 2x + 10x^2 - 38}{x^3 - 5x - 4x^2 + 20}$

4) $\frac{-2x^4 + 14x^2 - 29}{x^4 - 6x^2 + 9}$

5) $\frac{6x^2 + 18 - 5x}{x^3 + 3x}$

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

7) $\frac{5x - 9}{x^2 - 3x}$

8) $\frac{-7x - 26}{x^2 + 7x + 12}$

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

10) $\frac{-x^2 - 13x - 15}{x^2 + 3x}$

SATPREP Name_____

Assignment :Partical Fraction (Advance)

Date_____

Find the partial fraction decomposition of each.

1) $\dfrac{6x^2 + 18}{x^4 + 8x^2 + 16}$

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

2) $\dfrac{-2x^2 - 10 - x}{x^3 + 5x}$

$-\dfrac{2}{x} - \dfrac{1}{x^2 + 5}$

3) $\dfrac{-x^3 + 2x + 10x^2 - 38}{x^3 - 5x - 4x^2 + 20}$

$-1 + \dfrac{6}{x - 4} - \dfrac{3}{x^2 - 5}$

4) $\dfrac{-2x^4 + 14x^2 - 29}{x^4 - 6x^2 + 9}$

$-2 + \dfrac{2}{x^2 - 3} - \dfrac{5}{(x^2 - 3)^2}$

5) $\dfrac{6x^2 + 18 - 5x}{x^3 + 3x}$

$\dfrac{6}{x} - \dfrac{5}{x^2 + 3}$

6) $\dfrac{2x^2 - x - 8}{x^2 - 4x}$

$2 + \dfrac{2}{x} + \dfrac{5}{x - 4}$

7) $\dfrac{5x - 9}{x^2 - 3x}$

$\dfrac{3}{x} + \dfrac{2}{x - 3}$

8) $\dfrac{-7x - 26}{x^2 + 7x + 12}$

$-\dfrac{2}{x + 4} - \dfrac{5}{x + 3}$

9) $\dfrac{-2x + 5}{x^2 - 4x + 4}$

$-\dfrac{2}{x - 2} + \dfrac{1}{(x - 2)^2}$

10) $\dfrac{-x^2 - 13x - 15}{x^2 + 3x}$

$-1 - \dfrac{5}{x} - \dfrac{5}{x + 3}$