

- i. Show all relevant work. No work, no credit.
- ii. Write your answers in the spaces provided on the right.
- iii. Staple when you turn in the assignment.
- iv. Due Wednesday, November 12 at the beginning of the class.

**Write the partial fraction decomposition of the rational expression.**

1)  $\frac{x - 9}{(x - 4)(x - 5)}$

2)  $\frac{2x^2 - x - 19}{x(x + 1)(x - 1)}$

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

$$4) \frac{13x + 2}{(x - 1)(x^2 + x + 1)}$$

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