MAT 171 Homework Section 8.3: Partial Fractions

Name: _____

Write the form of the partial fraction decomposition of the rational expression. It is not necessary to solve for the constants.

1) $\dfrac{11x - 10}{(x - 2)(x + 1)}$

2) $\dfrac{6x^2 - 14x - 27}{(x + 2)(x - 3)^2}$

3) $\dfrac{5x^2 - 6x + 7}{(x - 1)(x^2 + 1)}$

Write the partial fraction decomposition of each rational expression.

4) $\dfrac{3x + 50}{(x - 9)(x + 2)}$

5) $\dfrac{4x^2 + 13x - 9}{x(x-1)(x+3)}$

6) $\dfrac{6x - 11}{(x - 1)^2}$

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