Math 580: Quiz 10

Show ALL Work   Name _____

1. The graphs of $y = x^3 - x^2 + 3x - 5$, and $y = 4x^3 + 5x^2 - 5x - 4$ intersect in three points (x_1, y_1), (x_2, y_2) and (x_3, y_3). Calculate the values of $x_1 + x_2 + x_3$ and $x_1^2 + x_2^2 + x_3^2$. Make sure your work is clear enough for me to see where your answer is coming from.

$x_1 + x_2 + x_3 = $ ☐

$x_1^2 + x_2^2 + x_3^2 = $ ☐