

Name _____

Date _____

Homework #7 Show All Work!

Period _____

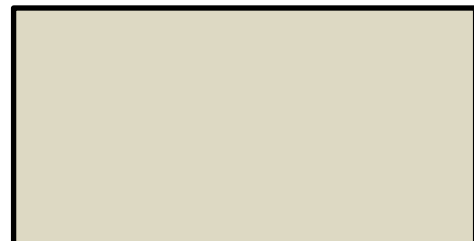
Use the following polynomials to answer the questions below, each part is worth 2 points:

$$A = 2x^4 - x^3 + 4x^2 + 3x$$

$$B = -x^4 - 5x^3 + x^2 + 2x - 1$$

- I) Find the sum of A and B
- II) Find the difference of A and B
- III) Find the product of A and B

1) The picture below represents a backyard with a garden in the yard. The dimensions of the backyard are $(3x^2 - 4x + 5)$ by $(x^2 + 2x - 1)$.



The garden is in the shape of a square and one side is represented by $(x^2 - 3)$. Answer the questions below.

I) Find the area of the entire backyard.

II) Find the area of the garden.

III) Find the perimeter of the entire backyard.

IV) Find the perimeter of the garden.

V) Find the area of the backyard that does not include the garden

VI) If a fence was put up around the entire backyard and around the garden, how much fencing would be needed?

