Mth 65 Quiz 3   *Franz Helfenstein*   **NAME**

Answers must be **legible**, **simplified** and **boxed** or **circled**. Answers may be given using exact **integers**, **fractions** or decimals accurate to **two** places. Write polynomials in **standard form.**

1)   Simplify: $6x^5 - 4x^3(2x^2 - 3x^3) =$

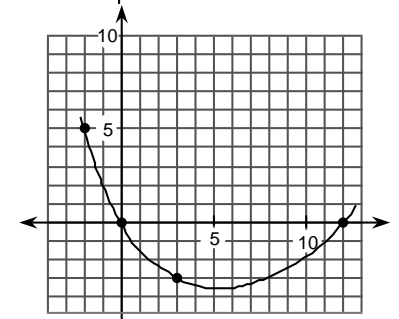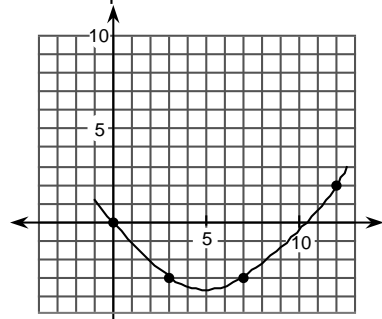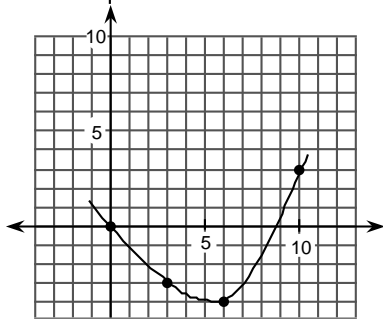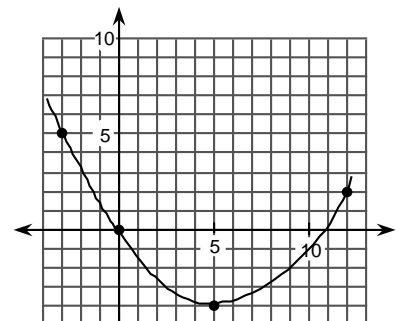2) $(4x^5 + 3x^3 - 5x^2 + 3x + 2) + (9x^5 - 11x^4 - 7x^2 - 3x + 5) =$
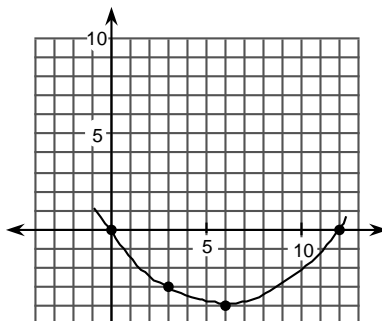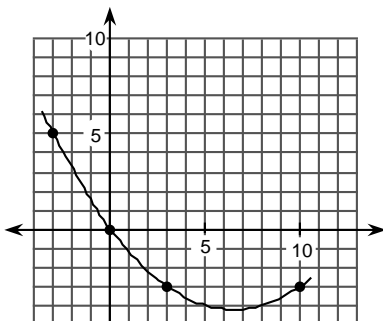
3) $(-7x^3 - 5x^2 + 13x + 2) - (-11x^3 - 7x^2 - 3x + 5) =$

4)   Given P(x) $= 11x^3 - 7x^2 - 3x + 5$, evaluate

(a) P(2) =   (b) P(-2) =

5)   Circle the graph which best matches $y = \dfrac{x^2 - 12x}{9}$. (Hint: Check all marked points)

Be sure your answers are written in **Standard Form**: i. e. $a_n x^n + \ldots + a_2 x^2 + a_1 x + a_0$.

6) $(2x + 3)(4x - 7) =$

7) $(x - 2)(x^2 - x + 3) =$

8) $x\,(3x^3 - 5x + 2) - (5x^2 - 7)(2x^2 + 3) =$

9) Solve for x: $36 - 24\dfrac{5x + 3}{5} = 16 - 13x$

10) Give the equation of the line through (-12, 7) & (8, 2) in slope intercept form.