Name _____   Period_____   Date _____

Ms. Schmidt   Pre-Calculus

Bi-Weekly Homework Quiz 11

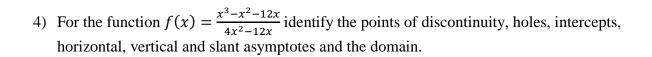This is a weekly homework quiz that will be given every week and is due back the following Monday.

This quiz is due back: **February 5th, 2018**

To receive full credit, all work must be shown. Any correct answer without work shown will receive only 1 point.

1) Solve: $216^{2x+3} = \left(\frac{1}{36}\right)^{-3n+1}$

2) Given the function, $f(x) = 2x^2 - x + 3$, evaluate $\frac{f(x+h)-f(x)}{h}$.

3) Find the roots by completing the square: $2x^2 - 8x + 1 = 0$

4) For the function $f(x) = \dfrac{x^3 - x^2 - 12x}{4x^2 - 12x}$ identify the points of discontinuity, holes, intercepts, horizontal, vertical and slant asymptotes and the domain.

5) Divide and state if the given binomial is a factor of the given polynomial.
$$(8m^4 - 59m^3 - 40m^2 + 9) \div (8m + 5)$$