MCV4U **Chapter 2 Quiz** **Name: _____**
February 2012 **Section 2.1 – 2.3**

K/U : / 4 marks	App: /10 marks	TIPS: /6 marks	GOOD LUCK!!

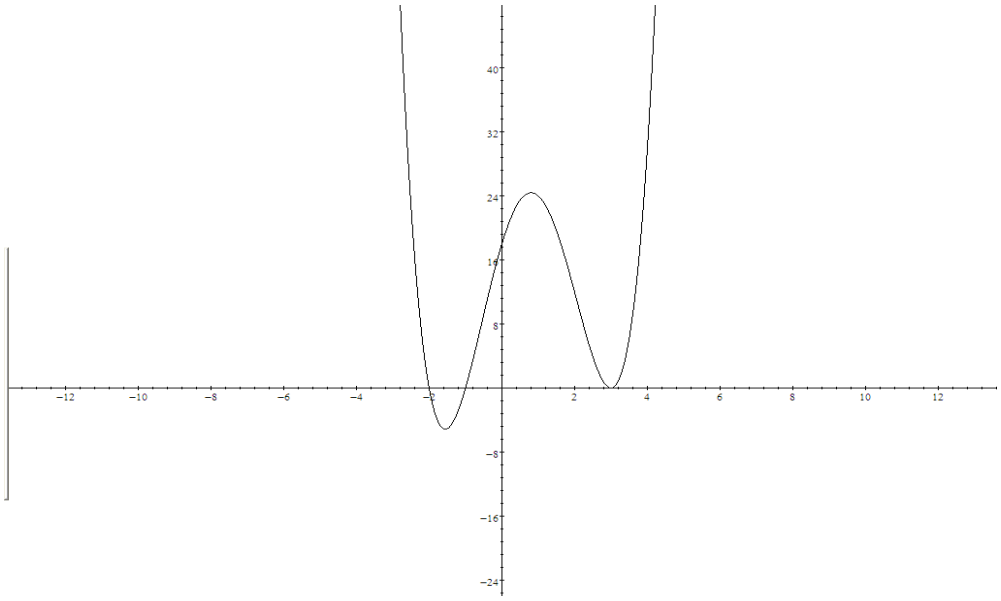
Complete solutions required for full marks.

1. Differentiate from First Principles.

$$y = \frac{x-2}{x+2}$$

K/U
[4]

2. Sketch the derivative of the given function on the same grid.



APP
[3]

3. Differentiate each function and simplify:

   a. $y = \frac{1}{6}x^6 - \frac{2}{5}x^5 + \frac{1}{3}x^3 + 7$ b. $f(x) = \frac{t^5 - 4t^2}{3t}$, $t > 0$

App [5]
[2]

4. Determine the points on the graph of $(x) = (3x - 2x^2)^2$, where the tangent line is parallel to the x-axis.