



Name: _____ () Class: _____ Date: _____

MA302.4.E1 – Simple Graphs Exercise

1. Sketch the graph of $y = 2(x-4)^2 - 5$. **Hence** sketch on the same axes the graph of $y = 8(x-2)^2 - 5$.
2. Sketch the graph of $y = (x+2)(x-1)^2(x-3)$. Hence sketch on the same axes $y = (x+2)(x-1)^2(6-2x)$.
3. Sketch the graphs of the following:
 - (a) $y = 6(2^x)$
 - (b) $y = \frac{2}{3x^n}$, where n is even
4. Determine the number of solutions to the following equations by graphical method.
 - (a) $3x^4 + \frac{2}{x} = 0$
 - (b) $2^x = 2x$
 - (c) $x^5 + x + 1 = 0$
 - (d) $2^x(x-1)(x+2)^2 = 10$