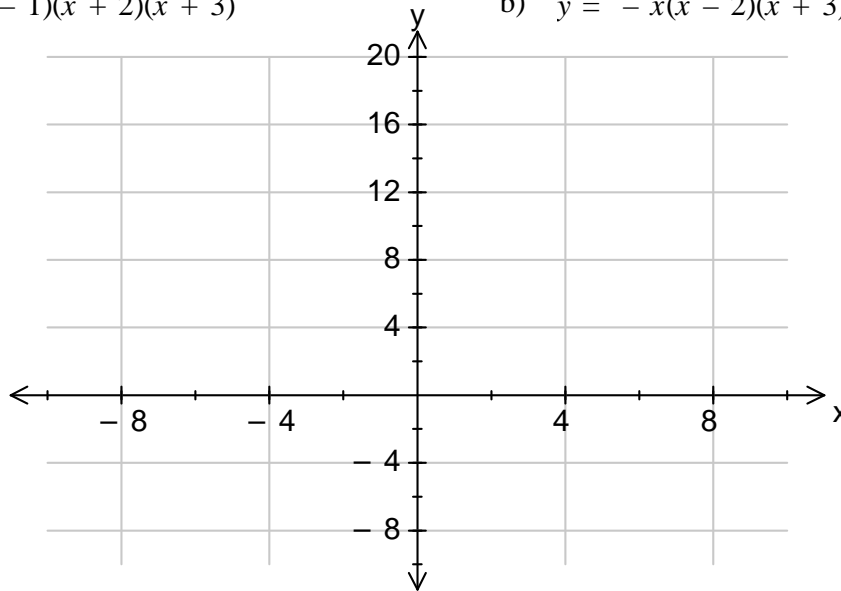(C1-4.1) Name:

Homework Questions 1 – Cubic Graphs

1. Plot the following graphs on the axis below

   a) $y = (x - 1)(x + 2)(x + 3)$ b) $y = -x(x - 2)(x + 3)$

2. Find the y intercept of the following graphs

   a) $y = (x + 4)(x - 2)(x + 6)$ Y intercept =

   b) $y = x(x - 3)(x + 5)$ Y intercept =

   c) $y = (x - 4)(x - 1)(x + 2)$ Y intercept =

   d) $y = (x - 9)(3x + 2)(5x - 1)$ Y intercept =

3. Find the x intercepts of the following graphs

   a) $y = (x - 6)(x - 4)(x - 2)$ X intercept =

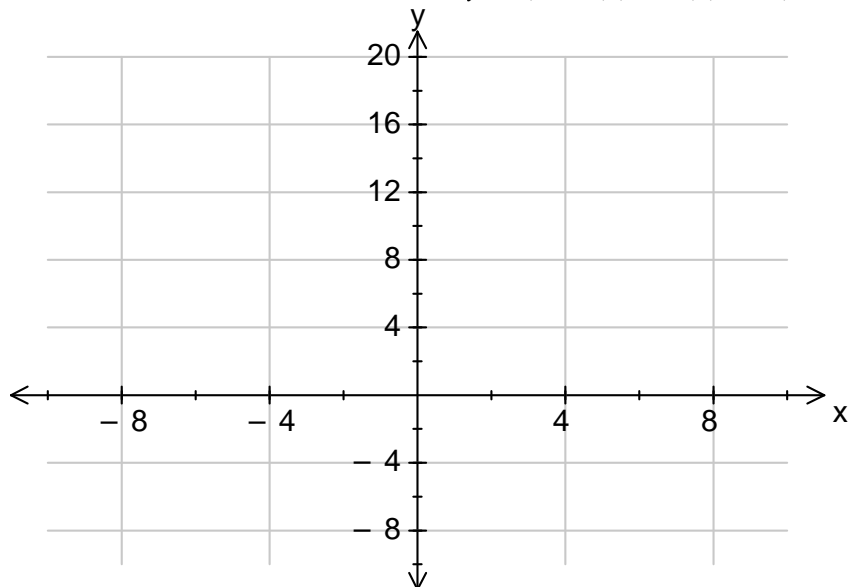   b) $y = x(x + 3)(x - 5)$ X intercept =

c) $y = (2x - 3)(x - 7)(7x - 2)$

X intercept =

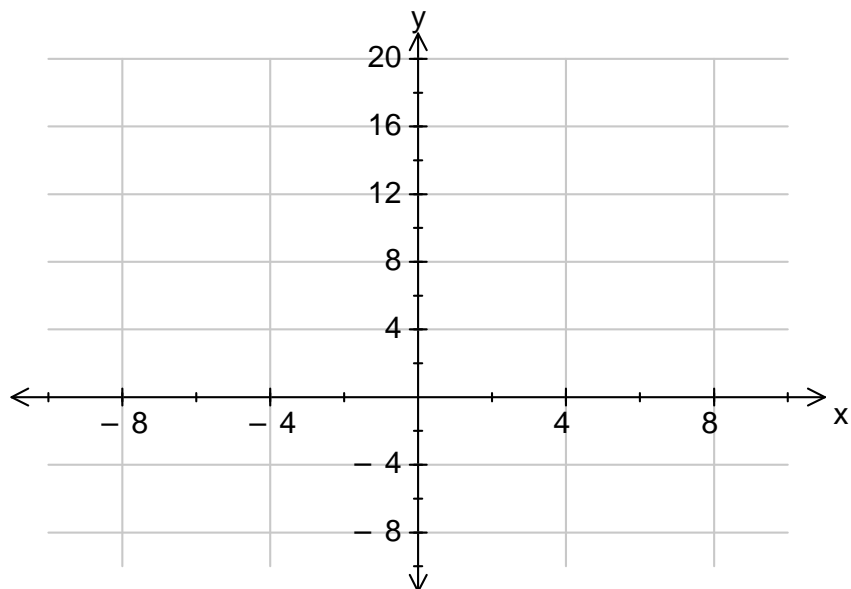d) $y = (3x + 2)(x - 4)(4x - 1)$

X intercept =

4. Draw the graph and state the special features of $y = (x - 2)(x - 1)(x + 1)$

Special Features

5. Draw the graph and state the special features of $y = x^3 - 9x$

Special Features