MPM 2D1 Name: _____

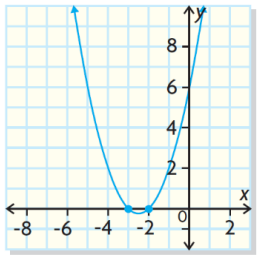
Factored Form

1. Match each graph with the correct equation.

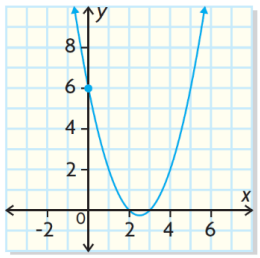
a) $y=(x-2)(x+3)$ b) $y=(x-3)(x+2)$ c) $y=(x+2)(x+3)$

d) $y=-(x-3)(x+2)$ e) $y=-(x-2)(x+3)$ f) $y=(x-2)(x-3)$

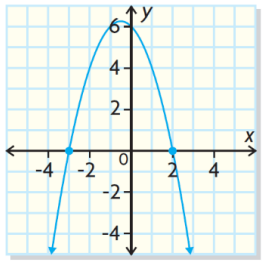
i)



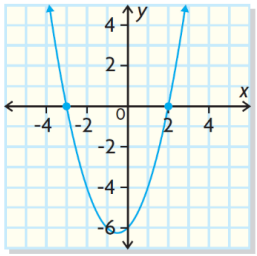
iii)



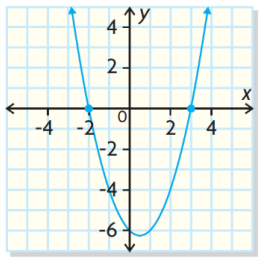
v)



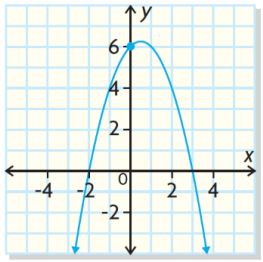
ii)



iv)



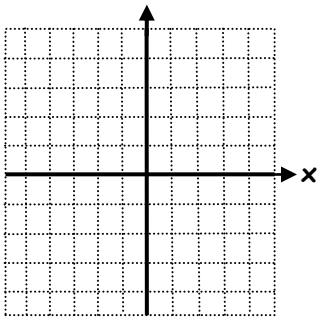
vi)

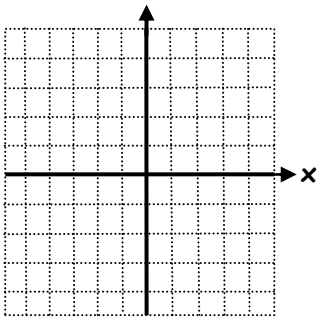


2. Complete the following for each quadratic relation below.

i) Determine the zeros.
ii) Determine the y-intercept.
iii) Determine the equation of the axis of symmetry.
iv) Determine the coordinates of the vertex.
v) Sketch the graph.

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





c) $y = (x-3)(x+3)$

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

3. Give an example of an equation of a quadratic relation whose vertex and x-intercept occur at the same point.