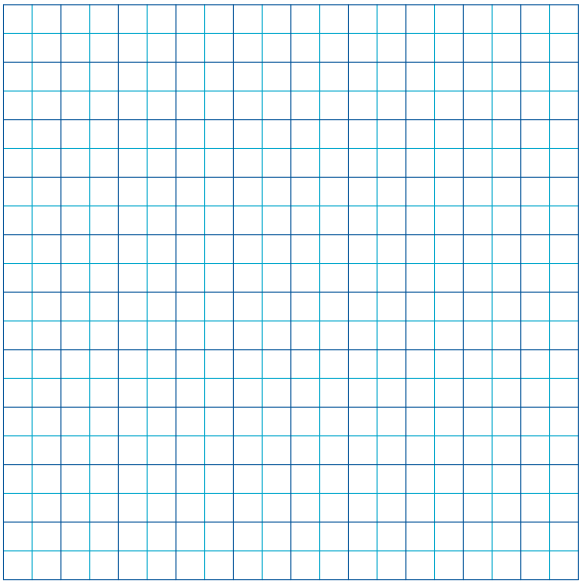
Use the graphing calculator and your algebra skills to find the required information; (16 marks)
Find

(i) X intercepts, (ii) Y intercept, (iii) Axis of symmetry
(iv) Vertex (v) another form of the quadratic (standard or factored)
(vi) make an accurate and detailed sketch on the provided graph insert

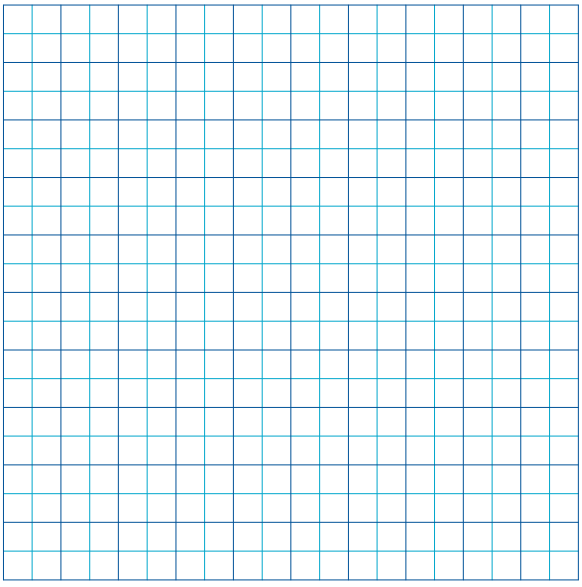
a) $y = 0.5(x-4)(x+2)$

y = _____ (standard)



a) $y = -2x^2 + 8x - 6$

y = _____ (factored)



Determine the equation of the quadratic that has zeros of (5,0) and (-3,0) and passes through the point (-1, -6). (4 marks)

Determine the missing form (standard or factored) for the following: (6 marks)

(a) $y = -1.25(2x+1)(5x-3)$ (b) $y = 3x^2 - 48$

Solve the following quadratic equations. (6 marks)

(a) $0 = -6(x+1)(2x-3)$ (b) $x^2 = 9x$ (c) $110 = -2x^2 + 32x$