

Worksheet #2 Lesson 2.2

Graph each quadratic function.

1) $f(x) = -2x^2 - 16x - 29$ a = _____ b = _____ c = _____

vertex = _____

AOS = _____

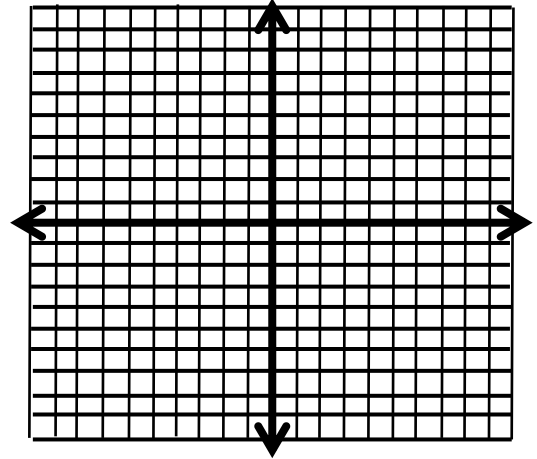
Opens = _____

Min/Max = _____

y - intercept = _____

Domain = _____ Range = _____

x					
y					



2) $f(x) = x^2 + 8x + 13$ a = _____ b = _____ c = _____

vertex = _____

AOS = _____

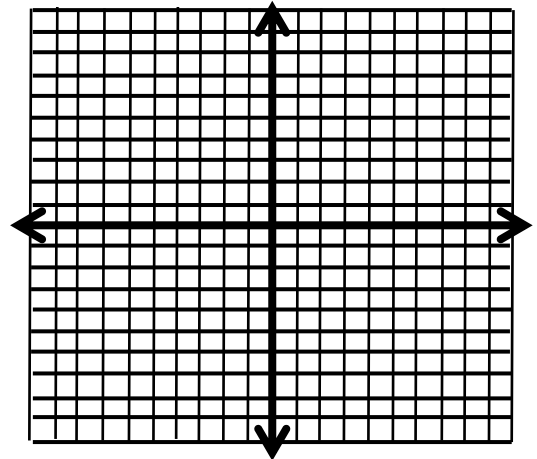
Opens = _____

Min/Max = _____

y - intercept = _____

Domain = _____ Range = _____

x					
y					



3) $f(x) = 2x^2 + 4x + 3$ a = _____ b = _____ c = _____

vertex = _____

AOS = _____

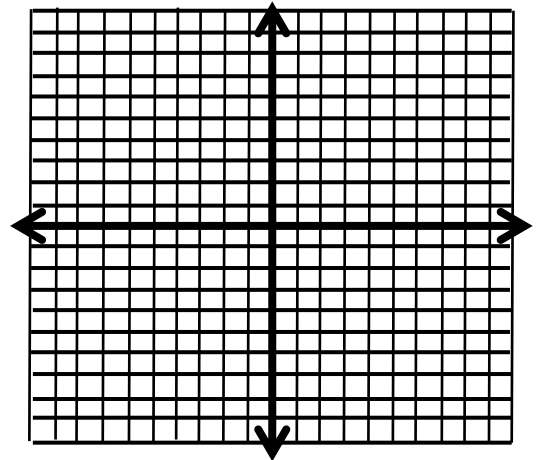
Opens = _____

Min/Max = _____

y - intercept = _____

Domain = _____ Range = _____

x					
y					



4) $f(x) = -x^2 - 2x$ $a = \underline{\hspace{1cm}}$ $b = \underline{\hspace{1cm}}$ $c = \underline{\hspace{1cm}}$

vertex =

AOS =

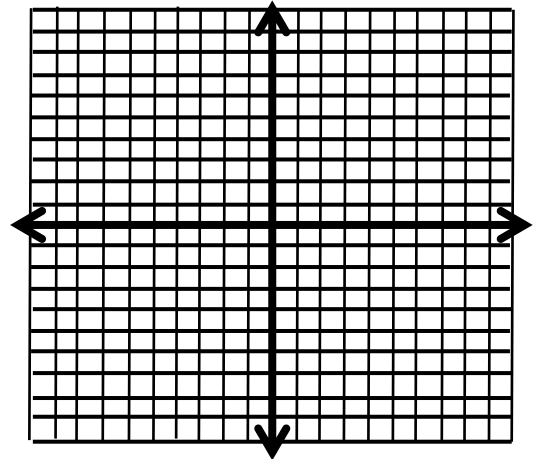
Opens =

Min/Max =

y - intercept =

Domain = Range =

x					
y					



Solve each word problem.

5) The height, h , in feet of an object above the ground is given by $h(t) = -16t^2 + 64t + 190$, where t is in seconds. How long will it take the object to reach its maximum height? What is the object's maximum height?

6) The value of Jennifer's stock portfolio is given by the function $v(t) = -300t^2 + 7200t + 5000$, where v is the value of the portfolio in dollars and t is the time in months. How long will it take Jennifer's portfolio to reach its maximum value? How much will the portfolio be worth at its maximum?