1. An object is shot into the air with an initial velocity of 144 ft/sec from the top of a 20 foot tall platorm.

The following equation models the objects height as a function of time:

$$h(t) = -16t^2 + 144t + 20$$

a) Find the maximum height of the object.

$$\frac{-144}{2(-16)} = 4.5$$

344 ftb) Find the time it takes the object to reach this maximum height.

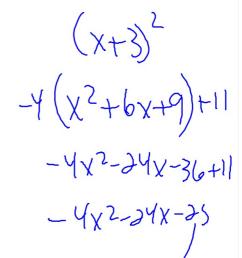


- 2. Use this quadratic: $y = -4(x+3)^2 + 11$
- a) Find the equation for the LOS.

$$\chi = -3$$

b) Find the coordinates of the Vertex.

$$(-3,||)$$



c) Find the y-intercept.

