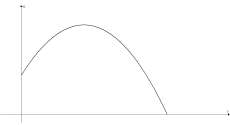
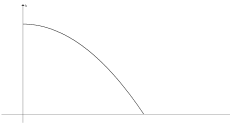
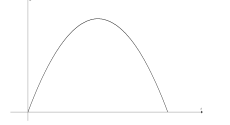


**Learning Goals:**

- I can graph a line using  $y = mx + b$  or using x-intercepts and y-intercepts.
- I can speed graph a parabola in the form  $y = a(x - p)^2 + q$ .
- I can state the maximum or minimum value and when it happens for any parabola.
- I can analyze an application using speed graphing

Knowledge & Skills	I have reviewed it	I have done questions	I think I've got this
<b>Lines</b>			
Graph using $y = mx + b$			
Graph using x & y – intercepts			
<b>Parabolas – “Speed Graphing”</b>			
$y = x^2 + q$			
$y = (x - p)^2$			
$y = ax^2$			
$y = a(x - p)^2 + q$			
State the Vertex $(p, q)$			
State the pattern: over 1 up 1 x a over 2 up 4 x a over 3 up 9 x a			
State maximum value and when it happens			
State minimum value and when it happens			
<b>Applications</b>			
“sketch” the parabola (3 types)			
1) “shoot an arrow up” 			
2) “toss a rock into the ravine” 			
3) “kick the soccer ball from the ground” 			
state the maximum height and when it happens			
determine the initial or starting height ( $t = 0$ )			
determine the height at a given time Ex. When $t = 4$ seconds			