Math II Unit 2 Project Assessment

The following graphs show the beginning of Jimmy, Sarah, and Melissa's shot put throws. Assuming the trajectory of the metal ball follows a **quadratic pattern**, graph the height of the ball (y-axis in feet   as it relates to time in seconds (x-axis). Then answer the questions that follow

Jimmy's Throw

x	h(x)
0	5
1	12
2	17
3	—
4	—
5	—
6	—
7	—
8	—
9	—
10	—

Height in feet

Time in seconds
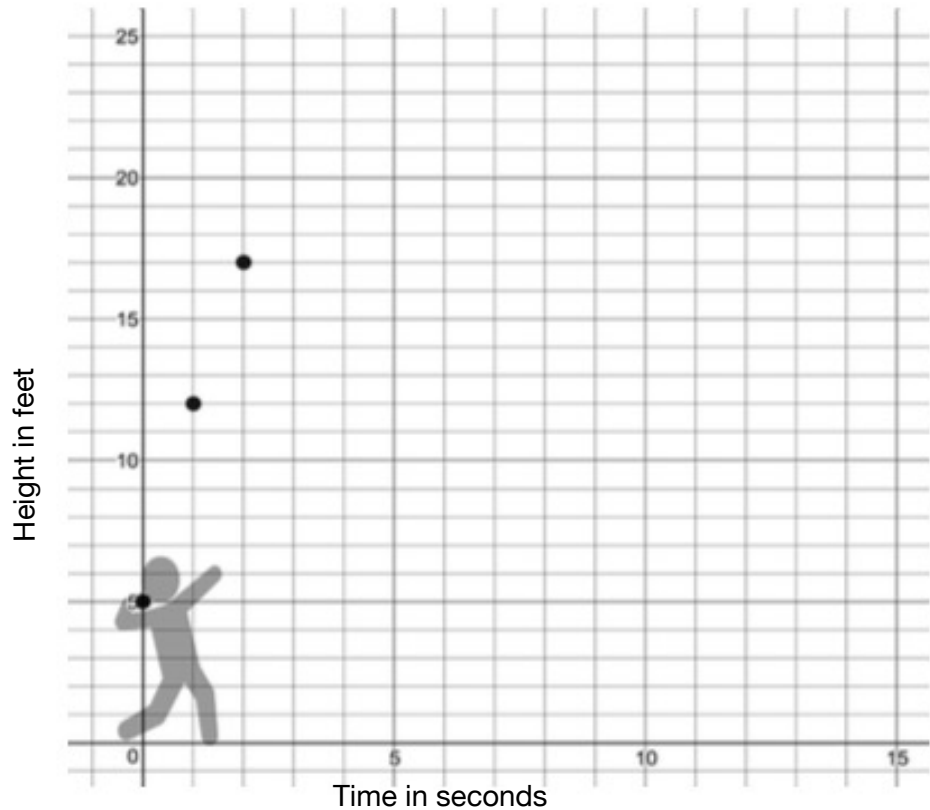
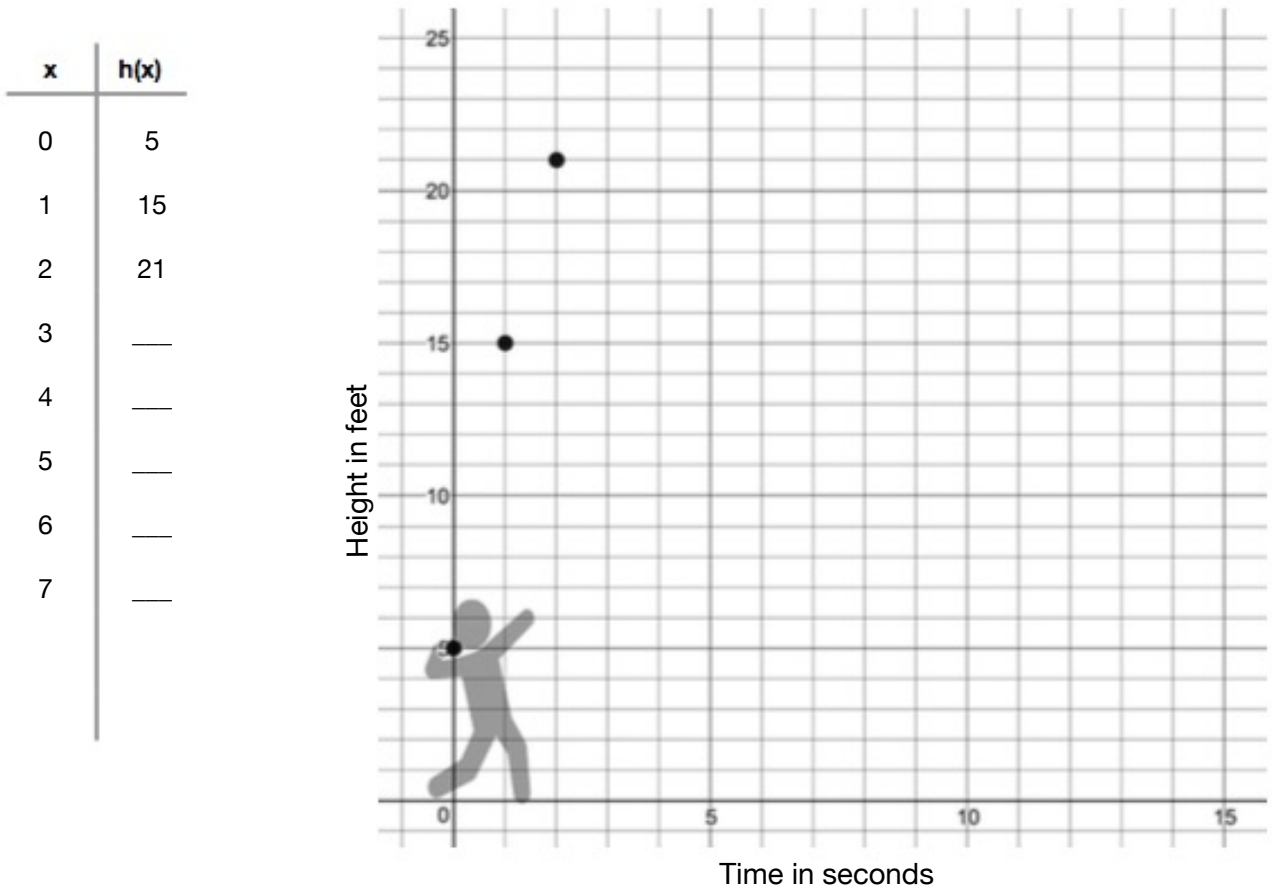How **high** did Jimmy throw the shot put?   _____ ft

When did the shot put hit the ground?   between _____ secs and _____ secs

Use Desmos to experiment and find the equation of the parabola in VERTEX FORM.
MAKE SURE IT GOES THROUGH THE POINTS GIVEN!!!

$$h(x) = \underline{\quad}(x - \underline{\quad})^2 + \underline{\quad}$$

Sarah's Throw

x	h(x)
0	5
1	15
2	21
3	——
4	——
5	——
6	——
7	——

Height in feet

Time in seconds

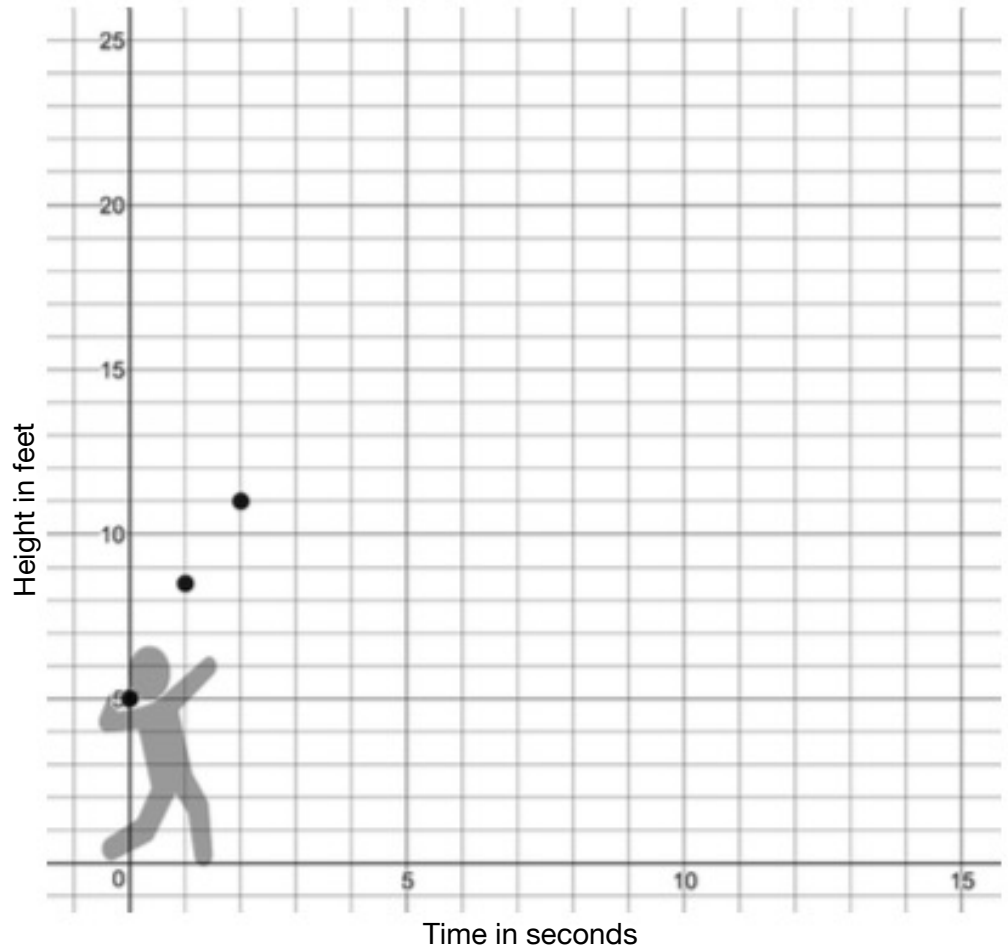How **high** did Sarah throw the shot put? _____ ft

When did the shot put hit the ground?   between _____ secs and _____ secs

Use Desmos to experiment and find the equation of the parabola in VERTEX FORM.
MAKE SURE IT GOES THROUGH THE POINTS GIVEN!!!

$$h(x) = \underline{\quad}(x - \underline{\quad})^2 + \underline{\quad}$$

Melissa's Throw

x	h(x)
0	5
1	8.5
2	11
3	——
4	——
5	——
6	——
7	——
8	——
9	——
10	——

Height in feet

Time in seconds

How **high** did Melissa throw the shot put? _____ ft

When did the shot put hit the ground? between _____ secs and _____ secs

Use Desmos to experiment and find the equation of the parabola in VERTEX FORM.
MAKE SURE IT GOES THROUGH THE POINTS GIVEN!!!

$$h(x) = \underline{}(x - \underline{})^2 + \underline{}$$