

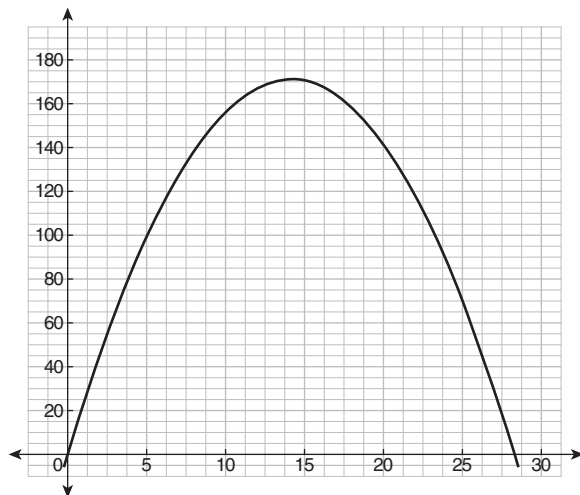
Interpreting Functions

The Rocket Task

The physics class made rockets. Three teams put their rockets in the parking lot and aimed for a safe area the teacher had made. Here are the results for the three different teams.

Team A estimated the function of their rocket's path as $h(f) = -.65f^2 + 22f + 1$, where f is feet from the launch, and h is the height in feet.

Team B recorded a graph of their rocket's flight using technology, feet from the launch on the horizontal axis, and height in feet on the vertical axis.



Team C used a phone app to record this table of values for their rocket.

Feet from launch	Height in Feet
2	59.2
10	208
15	239.25
20	223
25	159.25
30	48
31.7	0

Which rocket traveled the farthest from the launch spot? Why?

Which rocket went the highest into the air? Why?

What is the height of each rocket when it is 16 feet from the launch? Explain.

Which team has the fastest average rate of change from the launch to its maximum value? Explain your answer.