NAME:

DATE:

A2.Q2.BERMELLEMBO: THE QUADRATIC FUNCTION'S GRAPH

DAY G3

(GRAPHING AND ANALYSIS)

REVISITING G2 NOTES

SOME REVIEW OF BASICS

1. The height (in feet) of a cornhole bag thrown in the air after *t* seconds is modeled by the function $h(t) = -16(t - 1.45)^2 + 37.64$

State the Function Type and Shape:

State the vertex:

State the concavity:

A. Determine the amount of time it took the cornhole bag to reach its maximum height.
Include Units of Measure

B. Determine the maximum height of the cornhole bag in flight.
Include Units of Measure

C. What was the height of the cornhole bag the instant it was released?
Include Units of Measure

D. Draw a quick sketch of the cornhole bag in flight. Label key points.

2. The height (in feet) of a ball kicked in the air after *t* seconds is modeled by the function $h(t) = -16t^2 + 80t + 2$

STATE THE VERTEX:

ROUND ANSWERS TO THE NEAREST HUNDREDTHS AND INCLUDE UNITS OF MEASURE.

A. Determine the height of the ball after $t = 1.2$ seconds. *Include Units*

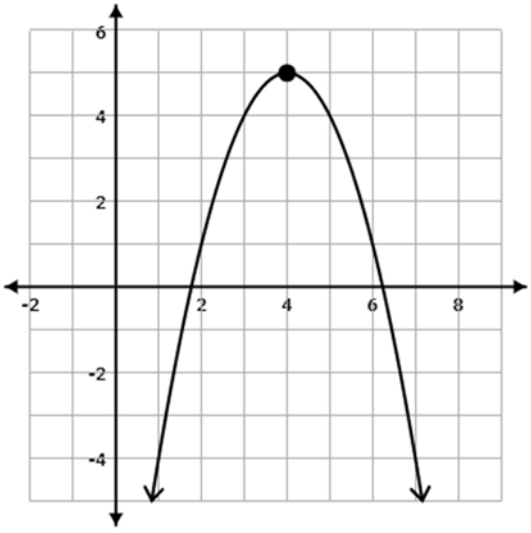
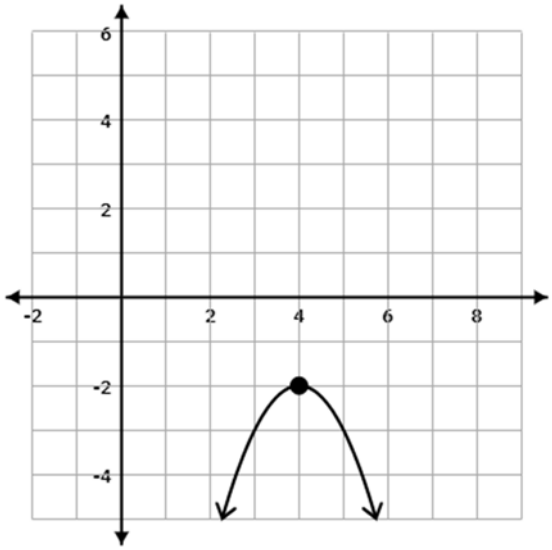
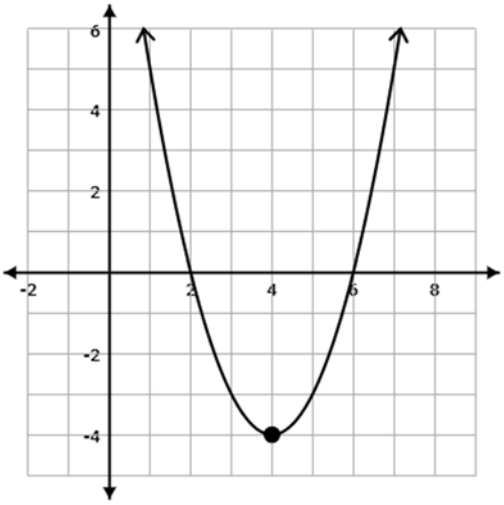
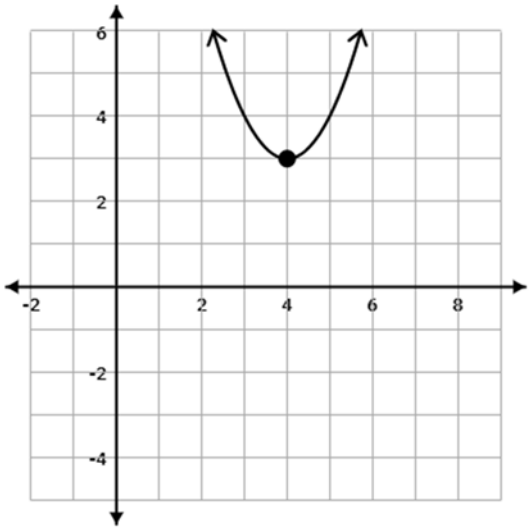
B. Determine the amount of time it took the ball to reach its maximum height. *Include Units*

C. Determine the maximum height of the ball in flight. *Include Units*

D. Determine how long it took for the ball to reach the ground. *Include Units*

E. Draw a quick sketch of the ball in flight. Label key points.

Round the following numbers to the nearest hundredths (two decimal places).

5.1682	6.4961	8.9943
3.2843	7.3942	6.9958
6.7552	8.2956	7.9912
6.4893	9.1912	4.9993

Determine the VERTEX and RANGE of each graph below.