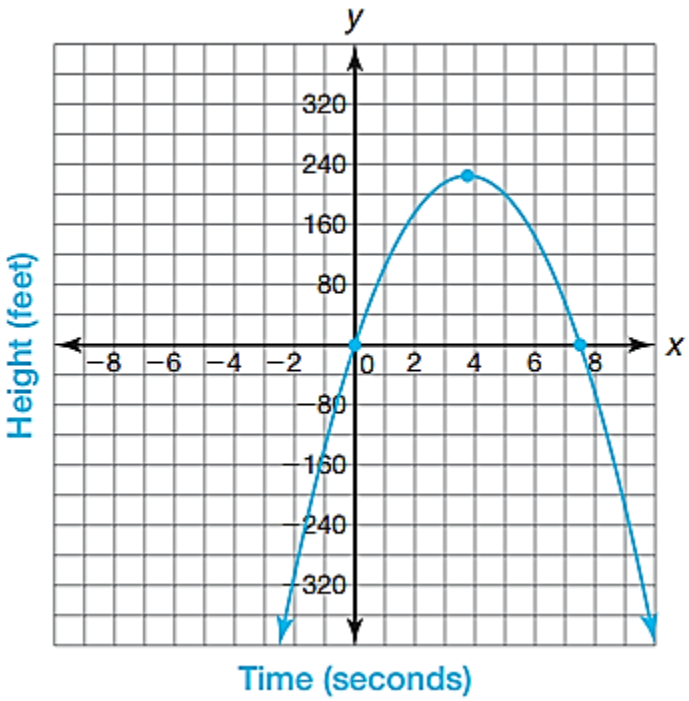
Algebra 1: 11.3 HW **Name**_____ **Period** _____
Domain, Range, Zeros and Intercepts

Problem Set

Graph the function that represents each problem situation. Identify the absolute maximum, zeros, and the domain and range of the function in terms of both the graph and problem situation. Round your answers to the nearest hundredth, if necessary.

1. A model rocket is launched from the ground with an initial velocity of 120 feet per second. The function $g(t) = -16t^2 + 120t$ represents the height of the rocket, $g(t)$, t seconds after it was launched.



Absolute Max or Min:

Zeros:

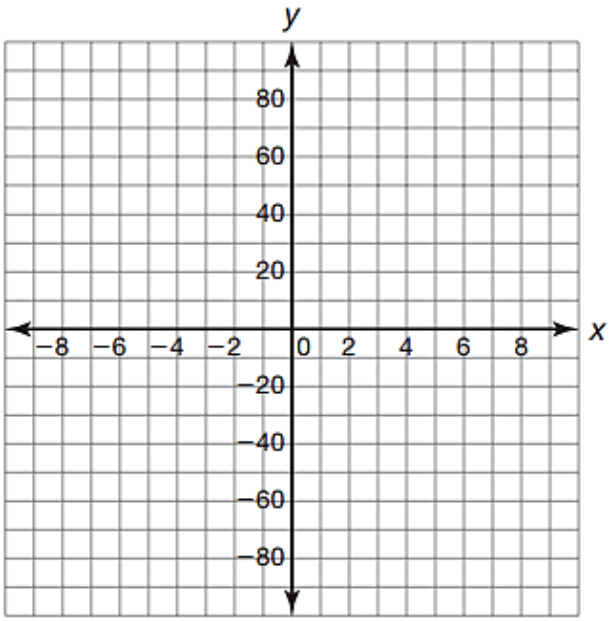
Domain of the graph:

Domain of this problem:

Range of the graph:

Range of this problem:

2. A model rocket is launched from the ground with an initial velocity of 60 feet per second. The function $g(t) = -16t^2 + 60t$ represents the height of the rocket, $g(t)$, t seconds after it was launched.



Absolute Max or Min:

Zeros:

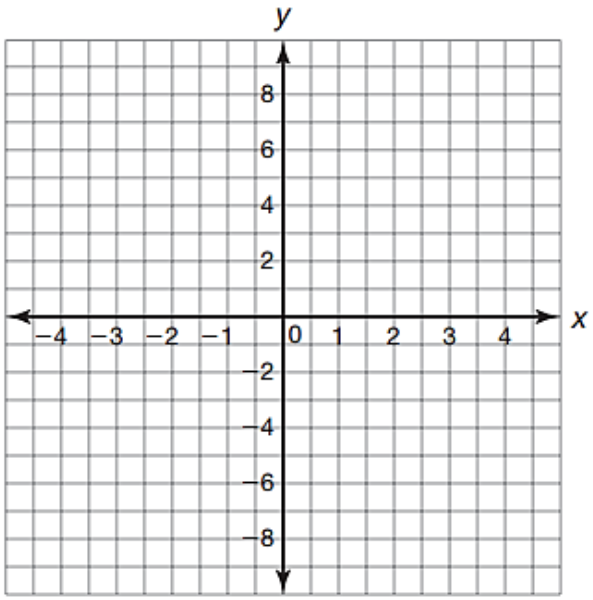
Domain of the graph:

Domain of this problem:

Range of the graph:

Range of this problem:

3. A baseball is thrown into the air from a height of 5 feet with an initial vertical velocity of 15 feet per second. The function $g(t) = -16t^2 + 15t + 5$ represents the height of the baseball, $g(t)$, t seconds after it was thrown.



Absolute Max or Min:

Zeros:

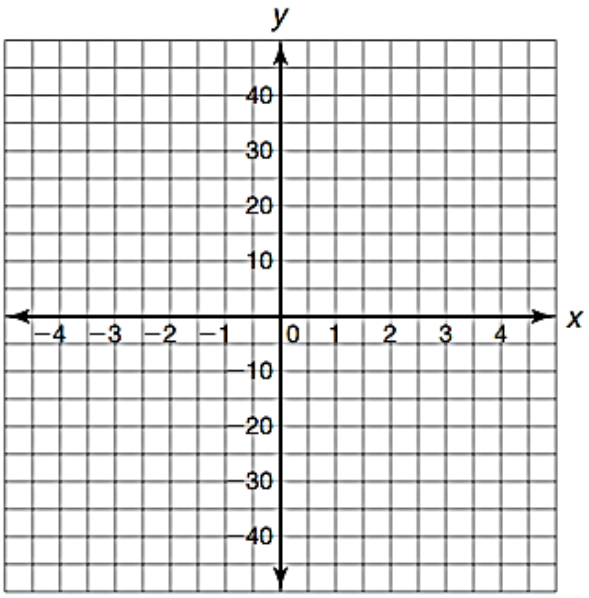
Domain of the graph:

Domain of this problem:

Range of the graph:

Range of this problem:

4. A football is thrown into the air from a height of 6 feet with an initial vertical velocity of 50 feet per second. The function $g(t) = -16t^2 + 50t + 6$ represents the height of the football, $g(t)$, t seconds after it was thrown.



Absolute Max or Min:

Zeros:

Domain of the graph:

Domain of this problem:

Range of the graph:

Range of this problem: