3M Quad Quiz 1 **Name:**

Ryan hits a baseball into the air. He quickly throws the bat down so that he can determine the relation that will represent his ball as it travels through air. Its height h, in metres, after t seconds is $h = -4.9(t - 2.8)^2 + 39$.

a. What was the initial height of the ball? _____
b. What was the maximum height of the ball? _____
c. When does the ball fall to the ground? _____
d. Find the height of the ball after 1 second. _____
e. Find the time the ball was at its maximum height. _____

3M Quad Quiz 2 **Name:**

The path of a ball thrown upwards from the roof of WCSS can be modelled by the relation h(t) =-2(t+1)(t- 4) where h is the height in m above the ground, t seconds after the ball is thrown.

a. What was the initial height of the ball? _____
b. What was the maximum height of the ball? _____
c. When does the ball fall to the ground? _____
d. Find the time the ball was at its maximum height. _____
e. State the Domain and Range as it applies to the situation. D=_____ R=_____
f. For how long is the ball at or above 10m ?. _____

3M Quad Quiz 3 **Name:**

A small rocket is launched into the air. Its height, *h*, in metres, after *t* seconds is modelled by $h(t) = -4.9t^2 + 39.2t + 1.75$

a. What was the initial height of the rocket? _____
b. What was the maximum height of the rocket? _____
c. Find the time the rocket was at its maximum height. _____
d. When does the rocket fall to the ground? _____
e. Find the height of the rocket after 1 second. _____
f. When is the rocket at that height again? _____