**Projectile Motion Problems**

1. Ken throws a discus at a school meet. Using the equation

h = -16t2 + 38t + 5

1. What is the initial height of the discus?
2. After how many seconds does the discus hit the ground?
3. Graph this equation on your calculator and sketch the graph on your paper.
4. Suppose a cheetah pouncing on an antelope leaps with an initial upward velocity of 19 feet per second.
5. How long is the cheetah in the air if it lands on the antelope’s hind quarter, 3 feet from the ground?
6. Graph this equation on your calculator and sketch the graph on your paper.