

# Word Problems

## I. Quadratic $y = ax^2 + bx + c$

### A. Projectile Motion

1. Maximum Height? Find the vertex
2. Hits the ground? Find the x-intercepts
  - a. factoring
  - b. complete the square
  - c. quadratic formula

## II. Exponential $y = a \cdot b^x$

### A. % change

1. increase,  $b = (1 + \%)$
2. decrease,  $b = (1 - \%)$

### B. Double, triple, quadruple...

## III. Linear – constant rate of change $y = mx + b$

### A. Slope & y-int

### B. Slope & 1 point

### C. 2 points