**MultiMath Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Part Deux – Solving Quadratic World Problems by Factoring**

**Question 1:** Solve the equations by factoring. First, move the constant over. When factored, state the zeros/solutions by writing x= # and x=#

a) b)

**Question 2:** A model rocket is launched straight upward with an initial velocity of 22 m/s. The height of the rocket, h, in metres, can be modelled by where t is the elapsed time in seconds. What is the maximum height the rocket reaches?  
**Steps:** Find zeros -> Average the Zeros->Plug that # into the equation.

**Question 3:** A rectangular enclosure has an area in square metres given by where w is the width of the rectangle in metres. Determine the width that would create a rectangular enclosure of 130 m2.  
**Steps:** Plug 130 into A -> move 130 to the other side of the equation -> factor.

**Question 4:** Fred wants to install a wooden deck around his rectangular swimming pool. The relation represents the cost of installation, where x is the width of the deck in metres and C is the cost in dollars. What will the width be if Fred spends $9480 for the deck? (Same idea as Question 3)