

Problem. A projectile is fired upwards from the ground. The height of the projectile above the ground is shown in the following table:

Time (seconds)	0	0.5	1	1.5	2	2.5
Height (feet)	0	20.5	31.36	36.25	30.41	28.23

a) Find a good model to fit this data.

b) Find the time at which the projectile hit the ground.

① Ctrl doc

$$y = -12.9x^2 + 42.2x + 1.2$$

$$(3.3, 0)$$

② 5 Data & Stat

③ Label x and y axis

④ MENU Analyze^{#4} Regression^{#6}

Quiz: Polynomials (7 questions with multiple parts)

Factored Form

Standard Form

Classify by degree and number of terms

End behavior

Identify zeros and multiplicity

Graphing

Modeling (in the calculator)