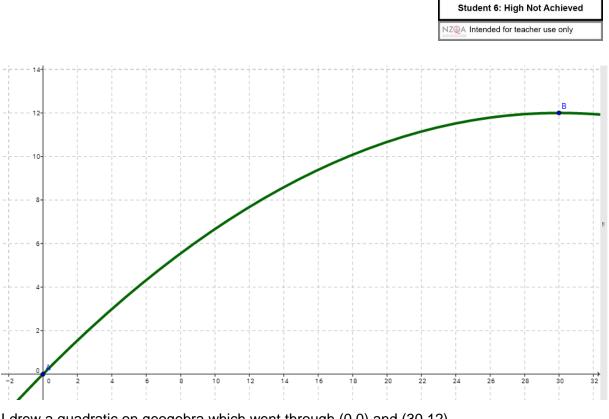
Exemplar for internal assessment resource Mathematics and Statistics for Achievement Standard 91257



I drew a quadratic on geogebra which went through (0,0) and (30,12) Here is a screenshot of my function.

We only need the bit of the graph from x = 0 to 30 for the first half of the bridge. The quadratic works because it has a vertex of 12 when x = 30, which is the top of the bridge. (1)

If I continued it it would go through (60,0) because it is symmetrical about the vertex.