

Mathematics For Queensland
Year 11 Mathematics B
Chapter Two – Quadratic Functions

Investigation – Tin Can Lab

Materials: marble, a curved ramp made from $\frac{1}{4}$ round moulding, carbon paper, a small tin can, a stand of some sort (usually just a collection of textbooks).

Students roll a marble down a curved ramp so that it leaves the end of the ramp moving horizontally. They mark where it lands on the floor (have it hit a piece of carbon paper). Students can roll the marble up to THREE times (after the carbon paper is close to the landing spot), measure and do calculations.

Then they get ONE and ONLY ONE chance to position horizontally a small tin atop the stand. They roll the ball ONCE ONLY down the ramp with the intention of getting the marble into the tin can.