**11C Maxima & Minima**

1. A child is playing with a yo-yo. The yo-yo leaves the child’s hand at time and travels vertically in a straight line before returning to the child’s hand. The distance in metres, of the yo-yo from the child’s hand after time seconds is given by:

1. Justify the restriction
2. Find the maximum distance of the yo-yo from the child’s hand, to 3sf