

Problem statement At time $t = 0$, Irwin fires a rubber band at a spider on the ceiling. At time $t = 3$ the rubber band hits the spider and then the rubber band falls. Suppose $s(t)$ represents the height of the rubber band above the floor at time t .

- a) Which is larger, $s(1)$ or $s(2)$?
- b) Which is larger, $s'(1)$ or $s'(2)$?
- c) Sketch possible graphs of s and s' for $0 \leq t \leq 4$.