

IB Physics SL Y1 – Free Fall HW #1

33. (I) A stone is dropped from the top of a cliff. It hits the ground below after 3.25 s. How high is the cliff?
34. (I) If a car rolls gently ( $v_0 = 0$ ) off a vertical cliff, how long does it take it to reach 85 km/h?
35. (I) Estimate (a) how long it took King Kong to fall straight down from the top of the Empire State Building (380 m high), and (b) his velocity just before “landing”?