

## Free-Fall

1. Throwing a Rock.
  - a. A rock is thrown upward from a 50 m high cliff with an initial speed of 20 m/s. Five seconds after release its speed is closest to...? (Let  $g = 10 \text{ m/s}^2$ )
  - b. A rock is thrown upward from a 50 m high cliff with an initial speed of 20 m/s. The maximum height of the rock (measured from atop the cliff) is closest to...? (Let  $g = 10 \text{ m/s}^2$ )
2. A stone dropped down a well accelerates with a constant value of  $g = 10 \text{ m/s}^2$  and hits the bottom after a time  $t = 3.0 \text{ s}$ . The depth of the well is closest to...?