PHYSICS

1. If a rock takes 0.750 s to hit the ground after being thrown down from a height of 4.80m, determine the rock's initial velocity. **(2.7 m/s [down]).**

2. Having scored a touchdown, a football player spikes the ball in the end zone. If the ball was thrown down with an initial velocity of 2.0 m/s from a height of 1.75m, determine how long until it hits the ground ? (0.43 s).

 An elevator moving downward at 4.00 m/s experiences an upward acceleration of 2.00 m/s² for 1.80s. What is its velocity at the end of the acceleration interval and how far has it traveled? (0.40 m/s [down], 4.0m). 4. The Drop Zone drops rides 27.0 m from rest before slowing them down to a stop. How fast are they moving before they start slowing? (23 m/s).

- 5. A pebble falls from a ledge 20.0 m high.
 - A) Find its velocity just before it hits the ground. (2.0x10¹ m/s [down]).
 - B) Find the time it takes to hit the ground. (2.0 s).