

14) The Beaumont rocketry club is holding a competition. There is a cloud cover at 1225 m. If a rocket is launched with a velocity of 171.5 m/s, determine how long the rocket is out of sight.

Variable: _____

Diagram: ↓

Equation: _____



Solution: _____

15) A rocket is launched at 19.6 meters per second (m/s) from a 58.8-meter tall platform. When does the rocket strike the ground?

Variable: _____

Diagram: ↓

Equation: _____

Solution: _____

16) A circus acrobat is shot out of a cannon with an initial upward speed of 50 ft/s. If the acrobat leaves the cannon 4 ft above the ground, how long will it take him to reach a net that is 10 ft above the ground?

Variable: _____

Diagram: ↓

Equation: _____



Solution: _____

17) A rock is launched directly upward at 64 feet per second (ft/s) from a platform 80 feet high.

Function $h(t) =$ _____

$a =$ _____ $b =$ _____ $c =$ _____

a) When will the rock reach its' maximum height? Variable: _____ Equation: _____

Solution: _____

b) What will be the rock's maximum height? Variable: _____ Equation: _____

Solution: _____