

(a) A'

rock is thrown horizontally at 25 m/s from a roof that is 15 m high. How long does it take to hit the ground? How far does the rock go horizontally before hitting the ground?

Projectile Motion - Cliff

WJ3

1.7s, 42m

2. A baseball is thrown from the roof of a building at 20 m/s in a horizontal direction. It strikes the ground 2.8 s later. Find

(a) How far from the building the baseball lands

56m

(b) The height of the building.

39.2m

3. A baseball is thrown horizontally from a window that is 220 m high. If the initial horizontal speed of the ball is 18m/s, find

(a) How long the ball takes to reach the ground

6.6s

(b) How far from the building it lands.

119m

4. The Great Gonzo wants to perform a new trick. He wants to shoot himself horizontally out of a cannon on top of a 10 m cliff to land in a pool 100 m away. At what velocity should he shoot out of the cannon?

10.6 m/s