Vertical Projection Examples

1. A stone is dropped down a 15m well. How long does it take to hit the bottom?

2. A ball is thrown upwards at 5.0ms⁻¹. What is the maximum height reached?

3. A ball is thrown upwards at 10ms⁻¹, then caught again. How long does it spend in the air?

4. A ball is thrown upwards at the edge of a cliff at 4.0ms⁻¹. It then lands 20m below. How long did it spend in the air?

Horizontal Projection Examples

1. A cannon ball is fired horizontally at 50ms⁻¹ from a 25m high cliff. How far does it land from the cliff (horizontally)?

2. Water is ejected horizontally from a fountain at a height of 15m. It lands 20m (horizontally) from the fountain. How fast does the water leave the fountain?