**Projectile motion Challenge 1**

A ball is thrown from a 10 m high cliff at the velocity $20 \text{ ms}^{-1}$ with an angle of $30^\circ$ to the horizontal plane as shown in the picture below. 40 m from the edge of the cliff is a 10 m high wall.

a) Will the ball pass over the wall?

b) If not, where will it hit the wall and with what velocity?