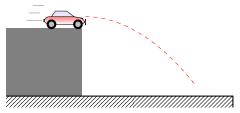
## Projectiles & Vectors

1. A certain projectile is fired from ground level with an initial x-velocity of 23.1 m/s and an initial y-velocity of 9.2 m/s.



- (a) Calculate and label the initial resultant velocity.
- (b) Calculate and label the velocity of the projectile at its maximum height.
- (c) Calculate and label the resultant velocity the moment before the projectile hits the ground

2. A car drives off a cliff at 15 m/s. It falls until it has a y-velocity of 7 m/s.



- (a) Calculate and label the initial velocity.
- (b) Calculate and label the resultant velocity the moment before the car hits the ground