

## Worksheet: Projectile Motion - Combination

NAME:

1. A beach ball, moving with a speed of  $+ 1.27$  m/s rolls off a pier and hits the water  $0.75$  m from the end of the pier. How high is the pier above the water?

x	y

2. A pitched baseball is thrown horizontally a distance of  $+18.3$  m at  $+44.8$  m/s. How far does the ball drop during its flight?

x	y

3. A dart player throws a dart horizontally at a speed of  $+ 12.4$  m/s. The dart hits the board  $0.32$  m below the height from which it was thrown. How far away is the player from the board?

x	y

4. A stone is thrown horizontally at 8.0 m/s from a cliff 78.4 m high. How far from the base of the cliff does the stone strike the ground?

x	y

5. Divers at Acapulco dive from a cliff that is 61 m high. If the rocks below the cliff extend outward for 23 m, what is the minimum horizontal velocity a diver must have to clear the rocks safely?

x	y