

1. The projectile is launched from a height h with a velocity v_0 . Determine the range R . (50%)

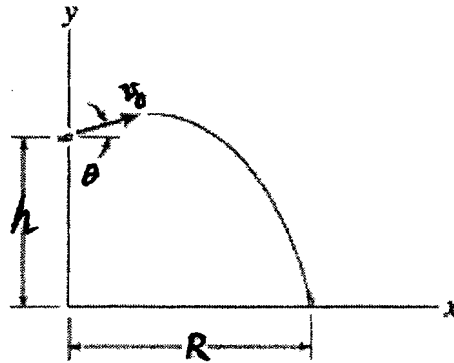
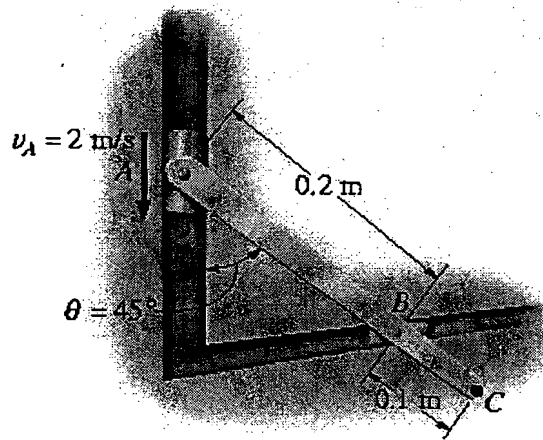


Fig. 1

2. The link shown in Fig. 2 is guided by two blocks at A and B , which move in the fixed slots. If the velocity of A is 2 m/s downward, determine the velocity of B at the instant $\theta=45^\circ$. (50%)



(a)

Fig. 2