Momentum and Collisions

Given each of the isolated systems where particles A and B collide, find any missing velocities and calculate the impulse exerted on particle B by particle A.

(a) (b)

(c) (d)

(e) (f)

$$\underbrace{\frac{u_{A} \text{ ms}^{-1}}{4 \text{ ms}^{-1}}}_{\text{4 ms}^{-1}} \underbrace{\frac{3 \text{ ms}^{-1}}{4 \text{ kg}}}_{\text{2.5 ms}^{-1}}$$

(g) (h)

$$\frac{u \text{ ms}^{-1}}{4 \text{ ms}^{-1}} \xrightarrow{\text{A}} \xrightarrow{\text{B}} \frac{u \text{ ms}^{-1}}{6 \text{ ms}^{-1}}$$