

9-5 Ex on Pg 213

$m$  of diver =  $80 \text{ kg} = m_d$



$$J_x = m(v_{fx} - v_{ix}) = -910 \text{ kg m/s}$$

$$J_y = m(v_{fy} - v_{iy}) = -3500 \text{ kg m/s}$$

$$J = 3616 \text{ kg m/s}$$

$$\frac{J}{\Delta t} = \frac{J}{14 \text{ ms}} = \bar{F}_{ny} = 2.6 \times 10^5 \text{ N}$$
$$\bar{F}_{ny}/m = a = 3.2 \times 10^3 \text{ m/s}^2 \text{ or } 32g$$