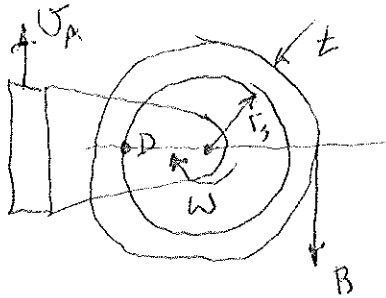


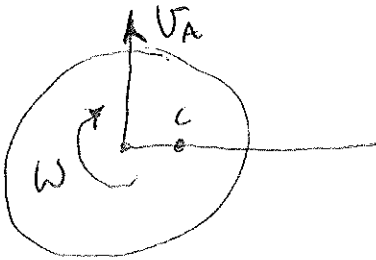
PROB. 15-75



$$v_A = 750 \frac{\text{MM}}{\text{SEC}} \uparrow, \quad r_3 = 80 \text{ MM}$$

$$\omega_3 = 15 \frac{\text{RAD}}{\text{SEC}}, \quad t = 20 \text{ MM}$$

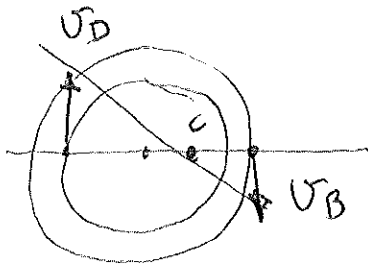
a) FIND C



$$v_A = r_C \omega$$

$$r_C = \frac{v_A}{\omega} = \frac{\left(750 \frac{\text{MM}}{\text{SEC}}\right)}{\left(15 \frac{\text{RAD}}{\text{SEC}}\right)} = 50 \text{ MM}$$

b) FIND v_B AND v_D



$$v_B = r_{CB} \omega = (100 - 50 \text{ MM}) \left(15 \frac{\text{RAD}}{\text{SEC}}\right)$$

$$v_B = 750 \frac{\text{MM}}{\text{SEC}} \downarrow$$

$$v_D = r_{CD} \omega = (80 + 50 \text{ MM}) \left(15 \frac{\text{RAD}}{\text{SEC}}\right) = 1950 \frac{\text{MM}}{\text{SEC}} \uparrow$$