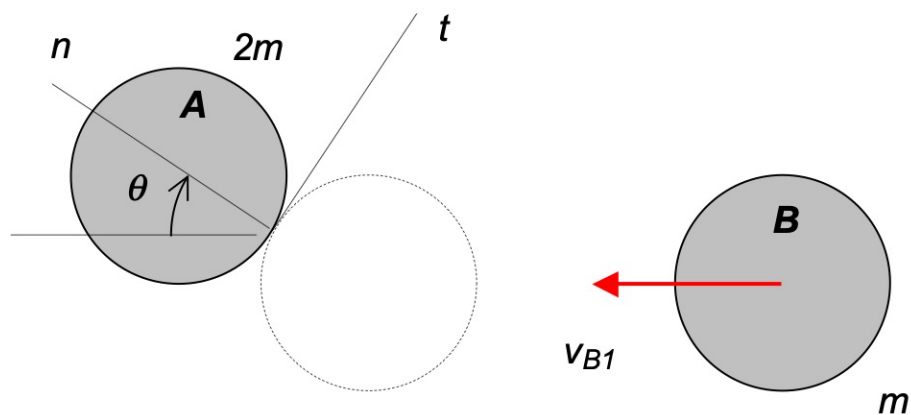


**Homework H.4.P**

**Given:** Disks A and B have masses of  $2m$  and  $m$ , respectively. Disk B is traveling in the direction shown with a speed of  $v_{B1}$  when it strikes the stationary disk A ( $v_{A1} = 0$  ft/s). Let  $e$  represent the coefficient of restitution of impact between A and B.

**Find:** Determine the velocity of disk A after impact. Write your answer as a vector in terms of its  $n$  and  $t$  components.



Use the following parameters in your analysis:  $e = 0.6$ ,  $\theta = 60^\circ$  and  $v_{B1} = 80$  ft/s.