

1) **ABET SO (a)**: Two wheels are connected by a cord as shown in the Figure. Determine the magnitude of the acceleration of point D in the position shown if the center C of the smaller wheel has an acceleration to the right of 0.8 m/s^2 and has reached a velocity of 0.4 m/s at this instant.

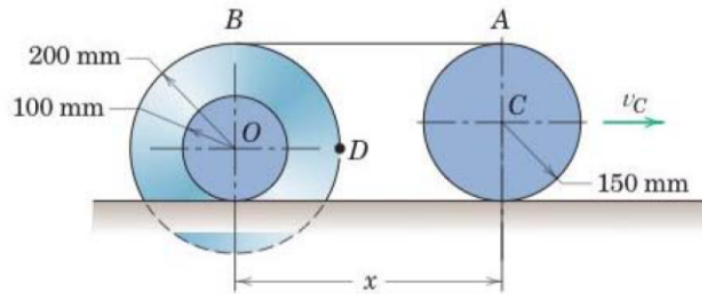


Figure 1: Problem 1

30 marks