## Problem P11

In the engine system shown $\mathrm{L}=250 \mathrm{~mm}$ and $\mathrm{b}=100$ mm . During a test of the system, crank AB is make to rotate with a constant angular velocity of 600 rpm counterclockwise. Plot the angular velocity of bar BD and the velocity of point D as functions of the crank angle $\theta$.

Hints:

- You will need to write your position vectors for
some general angle $\theta$.


- Use the vector algebra approach

A plot for the velocity of point D is shown below:


