

### Homework H12.B

**Given:** The beam is loaded as shown.

**Find:** For this problem:

- Calculate the magnitude and location of the single-force equivalent load for the distributed load between points C and D.
- Determine the reactions acting on the beam.

Use the following parameter values for your work:  $F = 4$  kips,  $w = 5$  kips/ft and  $d = 2$  ft.

