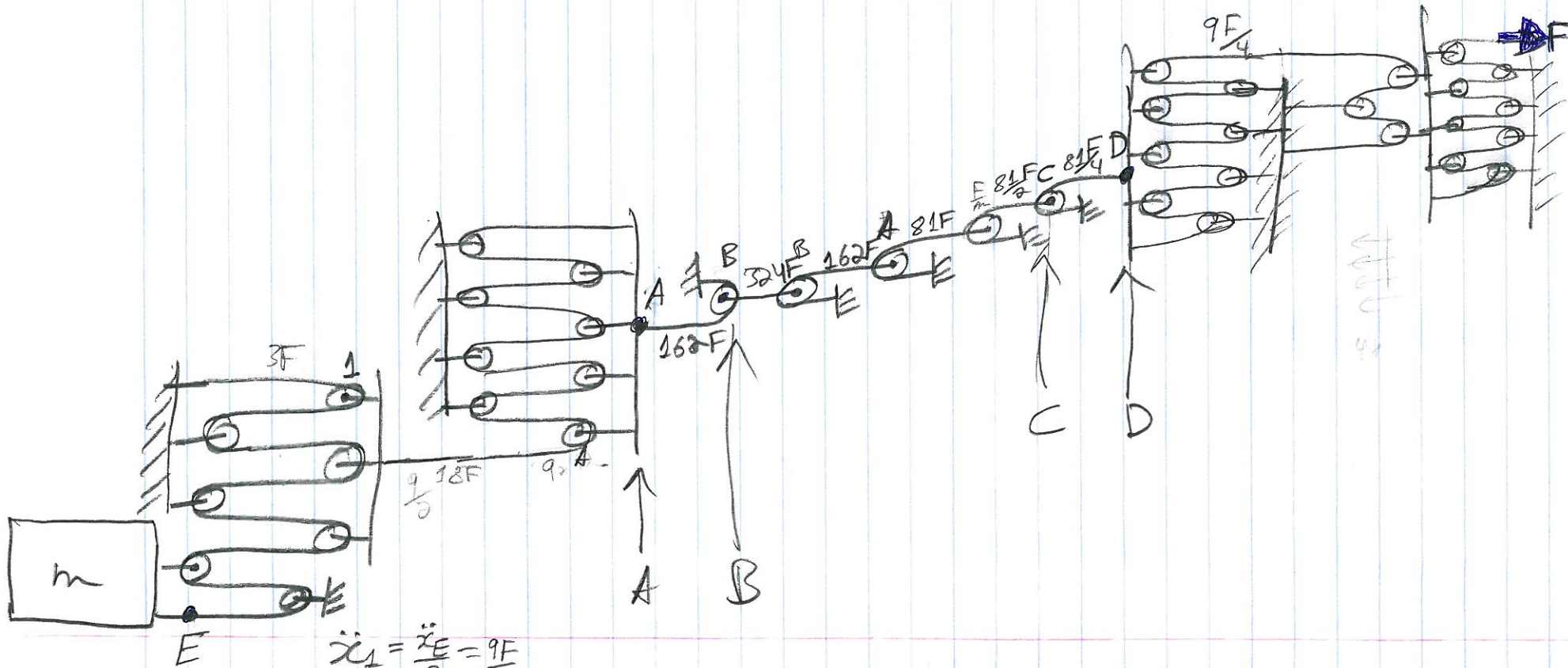


Soln. for  
 Prob. 1,  
 Prelim 2  
 Spring 2013

# Dynamics extra credit

## 39 Pulleys

A, B, C, D, E all on one pulley system.



$$\begin{aligned} \ddot{x}_1 &= \ddot{x}_E = 9F \\ 9\ddot{x}_A &= \ddot{x}_E \rightarrow \ddot{x}_A = \frac{F}{9} \\ 2\ddot{x}_B &= \ddot{x}_E \rightarrow \ddot{x}_B = \frac{F}{2} \end{aligned}$$