FOR THOSE WHO ONLY GOT 1 SHEET:

a: \( x = 0.5 \) m downwards
\( f_1 = 320 \text{ N/m} \)
\( f_2 = 800 \text{ N/m} \)
\( m = 50 \text{ kg} \)

b: DRAW A FREE BODY DIAGRAM OF THE MASS.

C: WHAT DOES \( f_1 \) NEED TO BE TO HAVE THE MASS MOVE 0.25 m in 0.1 seconds when released if all other given values remain the same?