Test 1

Remember:
Show all your work for full credit. Minimum of 3 steps:
What equation are you plugging into?
What numbers are you substituting?
What is your final answer?
Ask if anything seems unclear.

Vectors have 2 components or magnitude and direction!

Formulae and Constants:

\[ x - x_0 = v_{0x} t + \frac{1}{2} a_x t^2 \quad \text{[Eq. 1]} \]
\[ v_x^2 = v_{0x}^2 + 2a_x(x - x_0) \quad \text{[Eq. 2]} \]
\[ x - x_0 = \frac{1}{2} (v + v_0)(t - t_0) \quad \text{[Eq. 3]} \]
\[ x - x_0 = v_x t - \frac{1}{2} a_x t^2 \quad \text{[Eq. 4]} \]
\[ v_x = v_{0x} + a_x t \quad \text{[Eq. 5]} \]

\[ a_c = a_r = v^2/r \]
\[ f_k = \mu_k N \quad f_s \leq \mu_s F_N \]

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