

Physics 1214, Homework #9: solutions

Answers to multiple choice questions: M1: C; M2: B.

P1: Assuming origin at the bottom left corner of each figure: (a) $x = 6.25$ cm, $y = 6.25$ cm;
(b) $x = 6.91$ cm, $y = 7$ cm.

P2: $m_1 = 9$ g, $m_2 = 52.5$ g, $m_3 = 49$ g.

P3: $\mu_s = \frac{1}{2 \tan \theta}$

P4: $d = \frac{Tl \sin \theta - mg \frac{l}{2} \cos \theta}{Mg \cos \theta} = 2.41$ m