

Physics 121 - Test 2 Practice
July 20, 2009

Solutions to the practice test.

1.

- a) $F_x = 6.4x - 1.6$
- b) 8.64N

2.

- a) c,e
- b) d
- c) a,g

3. $\Delta U = -5.19 \times 10^{12} J$

4. $\Delta E = 5.77 \times 10^{11} J.$

5. $r_{cm} = (-0.5\hat{i} + 2.11\hat{j})$ m.

6. $\vec{v} = -0.02\hat{i}$ m/s (to the left)

7. $F = 29N$

8. $\frac{10}{3}MR^2$

9.

- a) 0.12m
- b) 4.86m/s

10. 18.5rpm