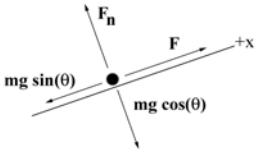
Spring 2010 Exam 2A Answers

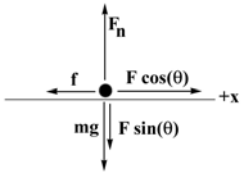
1. a = 7.288 m/s^2 , T = 57.59 N *[Free-body diagrams like Fig. 5.8, adding F]*

2. – 64.90 J

3. 26.58 m/s

4. F = 356.9 N



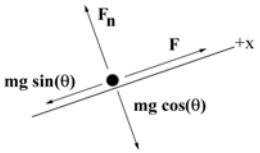
5. 

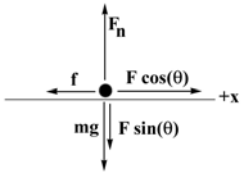
a = 8.119 m/s^2

6. 0.1330 m (solution must start with $E_f = E_i + W$, $W = P \cdot t$)

Spring 2010 Exam 2B Answers

1. F = 163. 7 N



2. 

a = 9.630 m/s^2

3. 0.3283 m (solution must start with $E_f = E_i + W$, $W = P \cdot t$)

4. a = 6.779 m/s^2 , T = 67.31 N *[Free-body diagrams like Fig. 5.8, adding F]*

5. – 92.58 J

6. 25.75 m/s or 25.7 m/s