Name: Date: Period:

Chapter 4 (Dynamics)

Homework Check A (collected October 11)

Intro to Forces p. 101 #7, 9 ..... Complete by Mon, Oct 7

Stamp Here 2 Points

Single-Body Dynamics p. 101 #10, 12, 17, 18 ..... Complete by Mon, Oct 7

Stamp Here 5 Points

Multi-Body Dynamics pp. 102-103, 106 #20, 25, 33ab, 79, 81 ..... Complete by Fri, Oct 11

Homework Quiz

Stamp Here 5 Points

Free-Body Diagrams pp. 102, 104 #21, 22, 52 ..... Complete by Fri, Oct 11

Draw the free-body diagrams only; nothing to calculate

Stamp Here 3 Points

Answers

7. 3134 N
9. 779.5 N
10. 12,600 N
12. 1.84 m/s^2
17. (a) 7.35 m/s^2; (b) 1293.6 N
18. 0.44 m/s^2
20. (a) 47 N; (b) 17 N; (c) 0 N
25. (a) 31.36 N, 62.72 N; (b) 35.36 N, 70.72 N
33. (a) 2.72 m/s^2 (b) 0.96 s
79. (a) 87,556 N; (b) 11,448 N; (c) 11,448 N, down
81. (a) either 45 N or 4.6 kg; (b) 37.4 N or 3.8 kg; (c) No. the minimum force needed to lift a 15-lb fish would be 15 lbs.

Homework will be accepted for full credit until the test. Homework turned in after the test will be accepted for half credit until the Unit 3 Test. *Please remember that you will not be eligible to complete test corrections if you do not turn in your homework.*

Name: Date: Period:

Chapter 4 (Dynamics)

Homework Check B (collected on Test Day)

Friction pp. 103-104 #36, 37, 42, 44 ..... Complete by Fri, Nov 1

Stamp Here 5 Points

Forces at an Angle pp. 102-104 #50abc, 56 ..... Complete by Mon, Nov 4

Stamp Here 5 Points

Conceptual Questions pp. 98-99 #1, 3, 6, 7, 10, 11, 12, 13 ..... Complete by Mon, Nov 4

These questions should have at least one full sentence of explanation

Stamp Here 5 Points

Misconceptual Questions pp. 99-100 #1, 2, 3, 5, 6, 7, 9 ..... Complete by Mon, Nov 4

You do not need to get this one stamped, but these are good review for your test!

Bonus Problems! #26, 34, 35, 49, 60 ..... Turn in separately on test day!

Test will be on Tue, Nov 5 (Pd 1) / Wed, Nov 6 (Pd 7).

Problem Answers

36. (a) 64.7 N; (b) 0 N
37. (a) 0.60; (b) 0.53
42. 4.17 m
44. 33.6 m/s
50. (b) 62.2 N;
    (c) 199.4 N;
    (d) $F_{Ax} = 70.6$ N, $F_A = 99.8$ N
56. $F_f = 104$ N; $\mu = 0.48$

Misconceptual Answers

1. a 2. abcd 3. d 5. c 6. c 7. c 9. c

Extra Practice

These problems are not required and are not for bonus. Work and answers are available on Schoology.

Single-Body ..... p. 101 #18; p. 103 #37b
Multi-Body ..... p. 103 #33a