

Midterm

1. 5.0 s
(EC) 440 ft
2. 11.5 degrees south of west
3. b) 31.4 m/s, 67.5° above the horizontal
(EC) 42 m
4. 0.433
5. b) 1.60 kN

Final Exam

1. 40.8 m/s
2. b) 2.17 km, 27.4 degrees east of south
(EC) 48.2 kW
3. 0.325
4. a) 2.00 m/s
b) Yes
(EC) Wouldn't change (with explanation)
5. b) 9.66 m/s, 54.0 degrees away from initial direction of ball
c) not *quite*, but almost!
6. a) 51.1 rad/s
b) 40.0 mph
(EC) 758 W
7. a) 20 degrees
b) 37.6 kN