**Problems Chapter 10**

1. 2 rad, (b) 0, (c) 128 rad/s, (c) 32 rad/s2, (e) No because it depends on time.

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1. ****6.5 rad/s2, (b) 4.8 sec, (c) 9.6 sec, (d) 303.7 rad = 48 rev
2. 3 rad/s, (b) 30 m/s, (c) 6 m/s2, (d) 90 m/s2

****16.4 sec

187.5 m/s2, (b) 89.80



1. ****1.5 rad/s2, (b) 0.4 J
2. 0.023 kgm2, (b) 0.0011 J

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4.7 x 10-4 kgm2



12.1 Nm



1. 0.06 m/s2, (b) 4.87 N, (c) 4.54 N, (d) 1.2 rad/s2, (e) 0.014 kgm2

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1. 9.7 rad/s2, (b) counterclockwise
2. 1.96 m/s, (b) same results because independent of R

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5.4 m/s

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6.1 rad/s