

Kinematics answers

- 1 (a) $a = 1.44\text{ms}^{-2}$ (b) $s = 218\text{m}$
- 2 (a) 11.6ms^{-1} (b) $t = 1.59\text{ sec}$ (c) no spinning, no air resistance .
- 3 (a) 30ms^{-1} (b) 195.6m
- 4 (a) 3.41ms^{-2} (b) 7.04 sec (c) 29.5ms^{-1}
- 5 (a) 11ms^{-1} (b) 132m (c) 39.7ms^{-1}
- 6 6 sec
- 7 (a) 9.1m (b) 8.4m (c) 2.5m (Why?)
- 8 (a) 36m (b) 26.6ms^{-1} (c)
- 9 (a) 9ms^{-1} (b) 10 secs
- 10 34.3ms^{-1}

Questions B

- 1 $T = 2.22\text{sec}$
- 2 98.25sec
- 3 14.4Km
- 4 880m