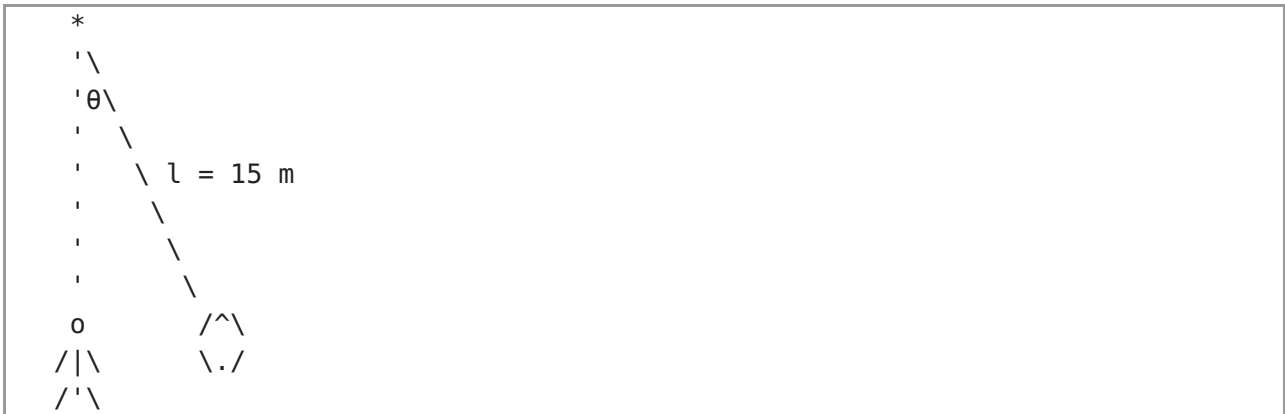


Ben Hammond
Period 3

Physics Ch 11 Quiz E

1. You and your classmate notice a building in your neighborhood being demolished by a giant wrecking ball that swings on a 15 m-long cable. Your persuasive classmate talks you into standing directly beneath the point where the wrecking ball is hung. You notice that the ball has been released and is swinging towards you. How much time do you have to move out of the way?



$$T = 2\pi \sqrt{l / g}$$

$$T = 2\pi \sqrt{(15 \text{ m} / 9.8 \text{ m/s}^2)}$$

$$T = 7.773 \text{ s}$$

$$0.5 T = 7.773 \text{ s} / 2$$

$$0.5 T = 3.9 \text{ s}$$

3.9 s