

Assignment #11

Reading:

Dec 7 Purcell Chapter 1.9-1.15, 2.1-2.9

Dec 9 Purcell Chapter 2.10-2.16, 3.1-3.3

Problems:

82. Kleppner and Kolenkow 7.27

83. Kleppner and Kolenkow 8.2

84. Kleppner and Kolenkow 8.6 (This may be solved in a “small angle” approximation in which you can assume that the coin leans inward only a little. The answer in the hint is misleading since the higher order terms in the $\tan(\alpha)$ are incorrect but irrelevant in this small angle approximation. An exact solution is possible but not required and is more difficult.)

85. Purcell 1.1

86. Purcell 1.3

87. Purcell 1.5

88. Purcell 1.8

89. Purcell 1.16

90. Purcell 1.19