Bonu$\,$s problem 7  
Due 11/3

Do problem 7 on pp. 797-798. Notice that there is a part (f) on p. 798!

Hints: For part (a), use the appropriate trig formula (which you need not prove). For part (c), use the formula in part (a) to first evaluate $2 \arctan(1/5) = \arctan(1/5) - \arctan(-1/5) = \cdots = \arctan(5/12)$ (fill in the dots!), and then do the same trick again to get $4 \arctan(1/5) = 2 \arctan(5/12) = \cdots = \arctan(120/119)$. No calculators please for parts (d)-(f)–that would kind of spoil the point of the problem!