

Turn in starred problems Thursday 11/4/2010.

Section 17.2: 5 (a), (e), (g); 12 (a), (d)*, (k)*, (s)

Section 17.3: 1, 4 (a), (b)*, (g), (m)*, 16 (c)*

9.A* Let $F(t) = |t|$ on $(-\pi, \pi]$; solve problem 17.3:18 for this function $F(t)$. To avoid a resonance, take $k = 1$ and $m = 4$. (Note that we studied this function in Problem 17.3.4(b), so that you can use the solution to that problem here without recomputing it.)

Comments, hints, instructions:

1. 17.2 12(k) is a bit tricky—think carefully.

2. 17.3 4(m) is easy, if you use the formula $\sin^2 x = (1 - \cos 2x)/2$ (which corresponds to the hint given for 4(l)). With this hint the problem can be done by inspection: **think before you compute, and you won't have to compute.** Note that this problem is related to 17.2 12(k).