

**Physics 230**

**Homework Set 16A**

**Due Date: Thursday December 3, 2015**

Textbook problems: 20.7.3, 20.7.4, 20.7.5

**Homework Set 16B**

**Due Date: Tuesday December 8, 2015**

Use Laplace transform over the variable  $t$  to show that the integral of  $\sin^2(xt)/x^2$  for  $x = -\infty$  to  $+\infty$  is equal to  $\pi t$ .

Textbook problems: 20.8.6, 20.8.7, 20.8.8