Do the following problems in Problem Set of the class note, dated May 2, 2002, and from the text.

1. Problem 31 on page 50.

2. Problem 46 on page 46. But use $x(t) = \sin(2\pi 1000 t)$ instead.

3. 2.1, p. 43 of the text.

4. 2.3, p. 43 of the text.

5. 2.7, p. 44 of the text.

6. 2.8, p. 44 of the text.

7. 2.9, p. 45 of the text.

8. 2.10, p. 45 of the text.