

Problem 1.1 :

Given: Is each of the following 1-D signals:

- Analog or digital?
- Continuous-time or discrete-time?

Find:

- a. Daily closes of the stock market.
- b. Output from phonograph-record pickup.

- words

Problem 1.2 :**Given:****Find:**

a.

c.

Answer Section

Problem 1.3 :**Given:****Find:**

b.

c.

Answer Section

Problem 1.4 :**Given:****Find:**

a.

Answer Section

Problem 1.6 :**Given:****Find:**

b.

Answer Section

Problem 1.7 :**Given:****Find:**

Answer Section

Problem 1.11 :**Given:****Find:**

Answer Section

Problem H :**Given:** Euler's formula**Find:** Show how to derive

$$\cos x = \frac{e^{jx} + e^{-jx}}{2}$$

and

$$\sin x = \frac{e^{jx} - e^{-jx}}{2j}$$

Answer Section

Problem I :

Given: The discussion in Lecture and the lecture notes.

Find: List at least ten examples of signals encountered in real life.

Answer Section