# LISTA 1

# **ANÁLISE DE SÉRIES TEMPORAIS**

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### Descrição da atividade:

• Exercícios 1.1 a 1.6 do Cap.1 (pag.10) de Cryer & Chan (2008)

## Exercício 1.1

Use software to produce the time series plot shown in Exhibit 1.2, on page 2. The data are in the file named larain.

• Resposta:

#### Exercício 1.2

Produce the time series plot displayed in Exhibit 1.3, on page 3. The data file is named color.

• Resposta:

#### Exercício 1.3

Simulate a completely random process of length 48 with independent, normal values. Plot the time series plot. Does it look "random"? Repeat this exercise several times with a new simulation each time.

• Resposta:

#### Exercício 1.4

Simulate a completely random process of length 48 with independent, chi-square distributed values, each with 2 degrees of freedom. Display the time series plot. Does it look "random" and nonnormal? Repeat this exercise several times with a new simulation each time.

• Resposta:

#### Exercício 1.5

Simulate a completely random process of length 48 with independent, t-distributed values each with 5 degrees of freedom. Construct the time series plot. Does it look "random" and nonnormal? Repeat this exercise several times with a new simulation each time.

• Resposta:

#### Exercício 1.6

Construct a time series plot with monthly plotting symbols for the Dubuque temperature series as in Exhibit 1.9, on page 7. The data are in the file named tempdub.

• Resposta: