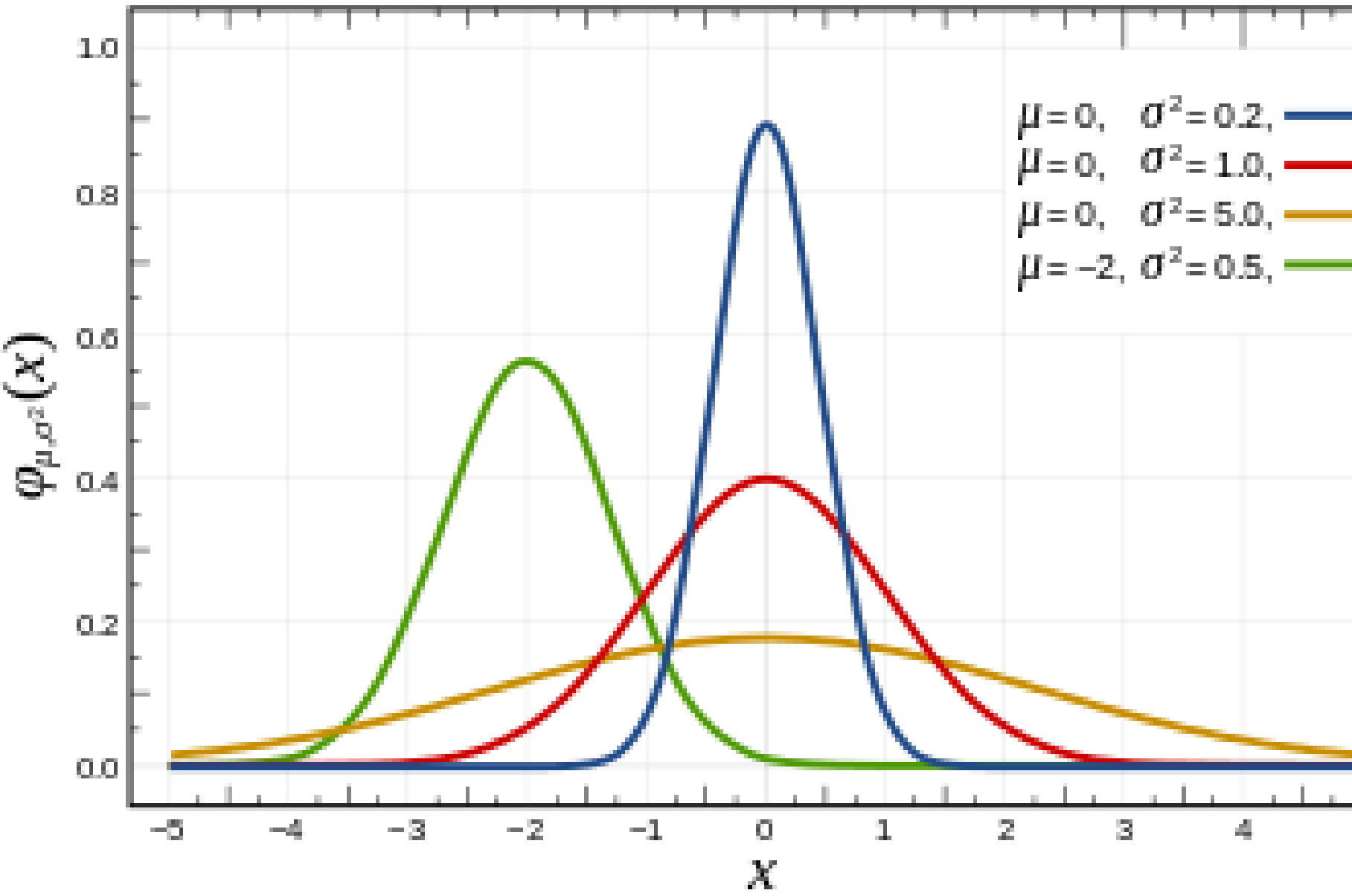
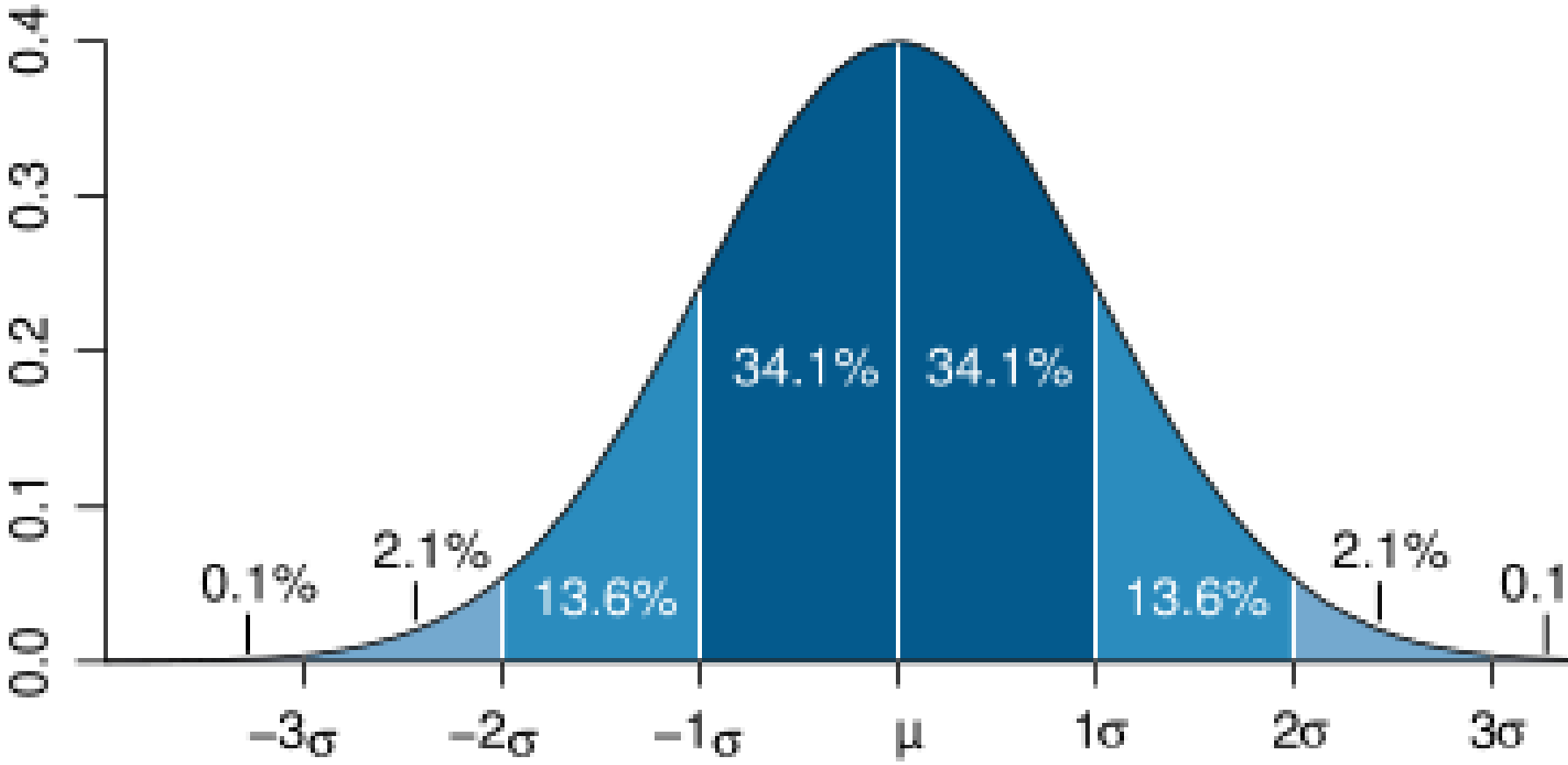

$\mu = 0, \quad \sigma^2 = 0.2,$
$\mu = 0, \quad \sigma^2 = 1.0,$
$\mu = 0, \quad \sigma^2 = 5.0,$
$\mu = -2, \quad \sigma^2 = 0.5,$
$\varphi_{\mu,\sigma^2}(x)$
x
1.0
0.8
0.6
0.4
0.2
0.0
−5
−4
−3
−2
−1
0
1
2
3
4


0.0
0.1
0.2
0.3
0.4
0.1%
2.1%
13.6%
34.1%
34.1%
13.6%
2.1%
0.1
−3σ
−2σ
−1σ
μ
1σ
2σ
3σ

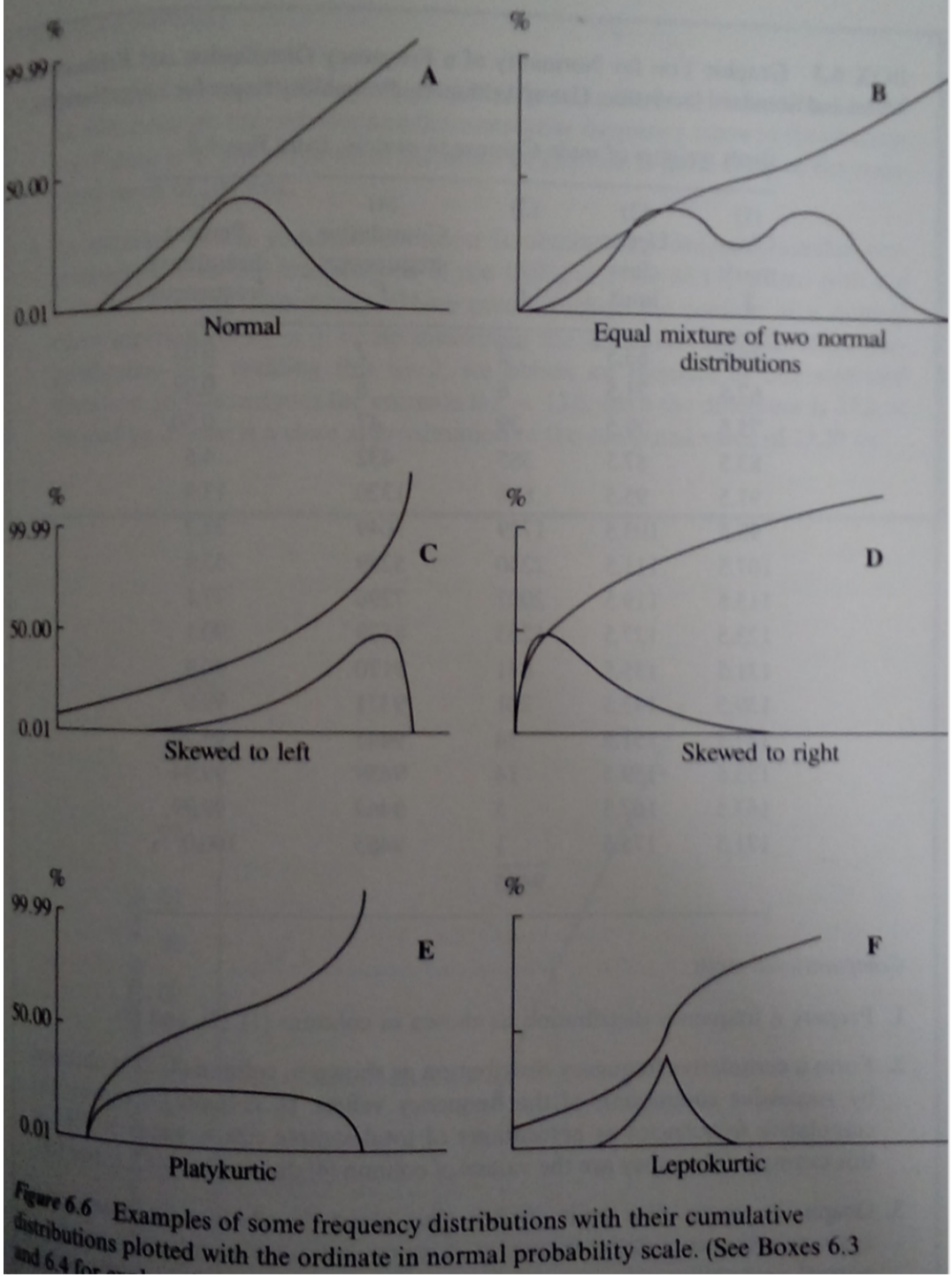
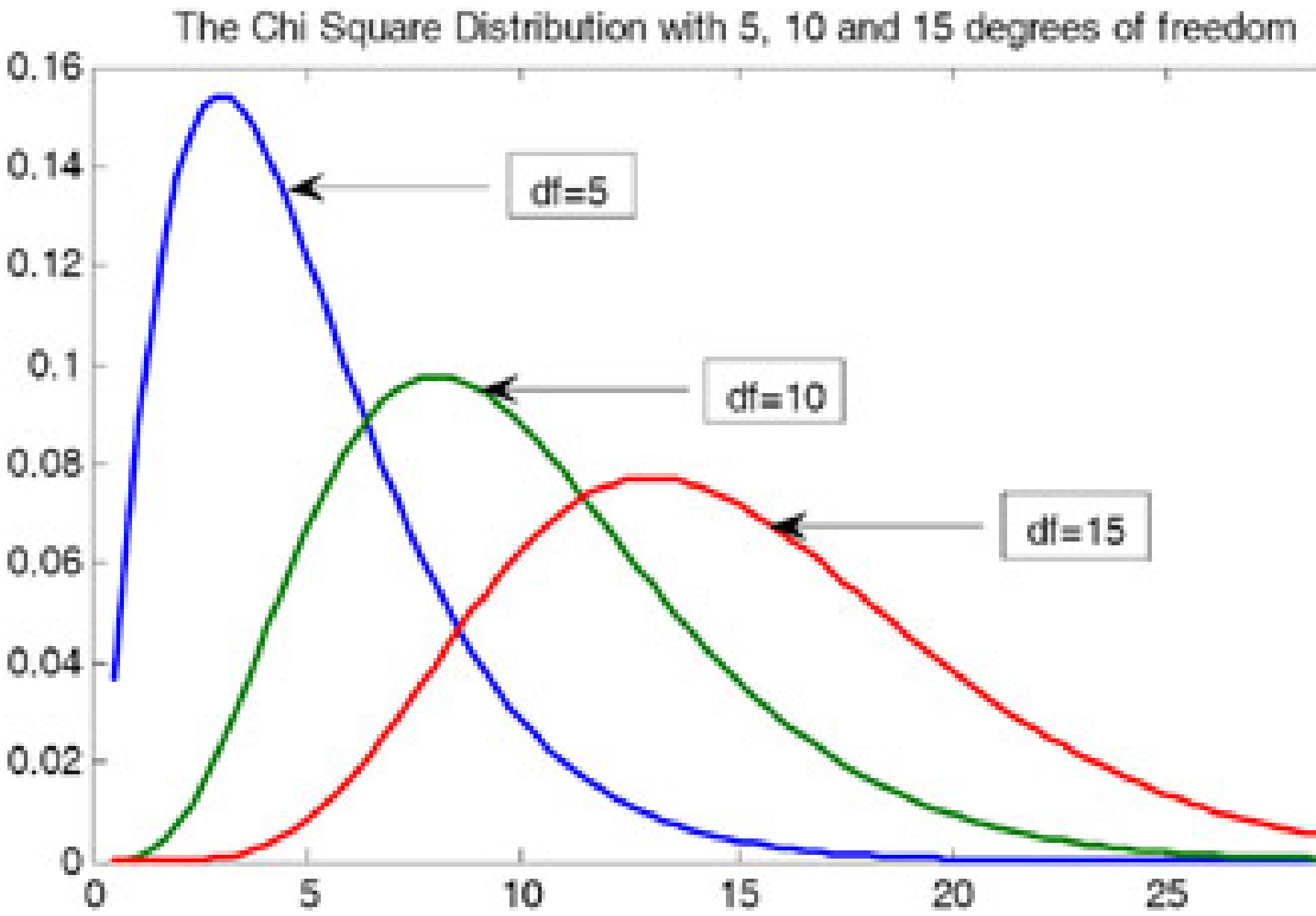
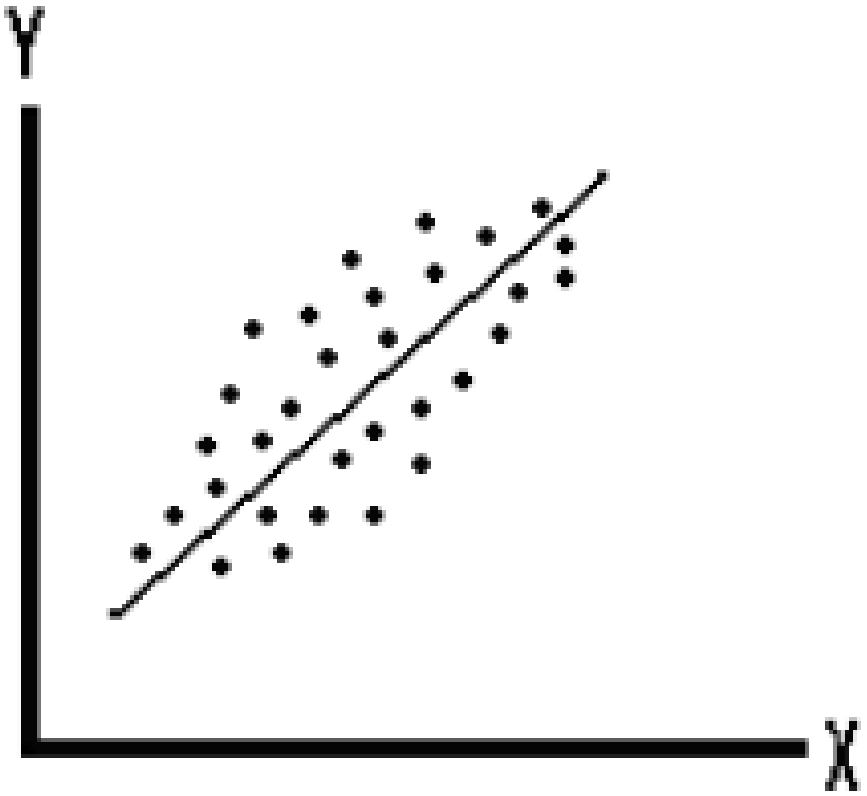


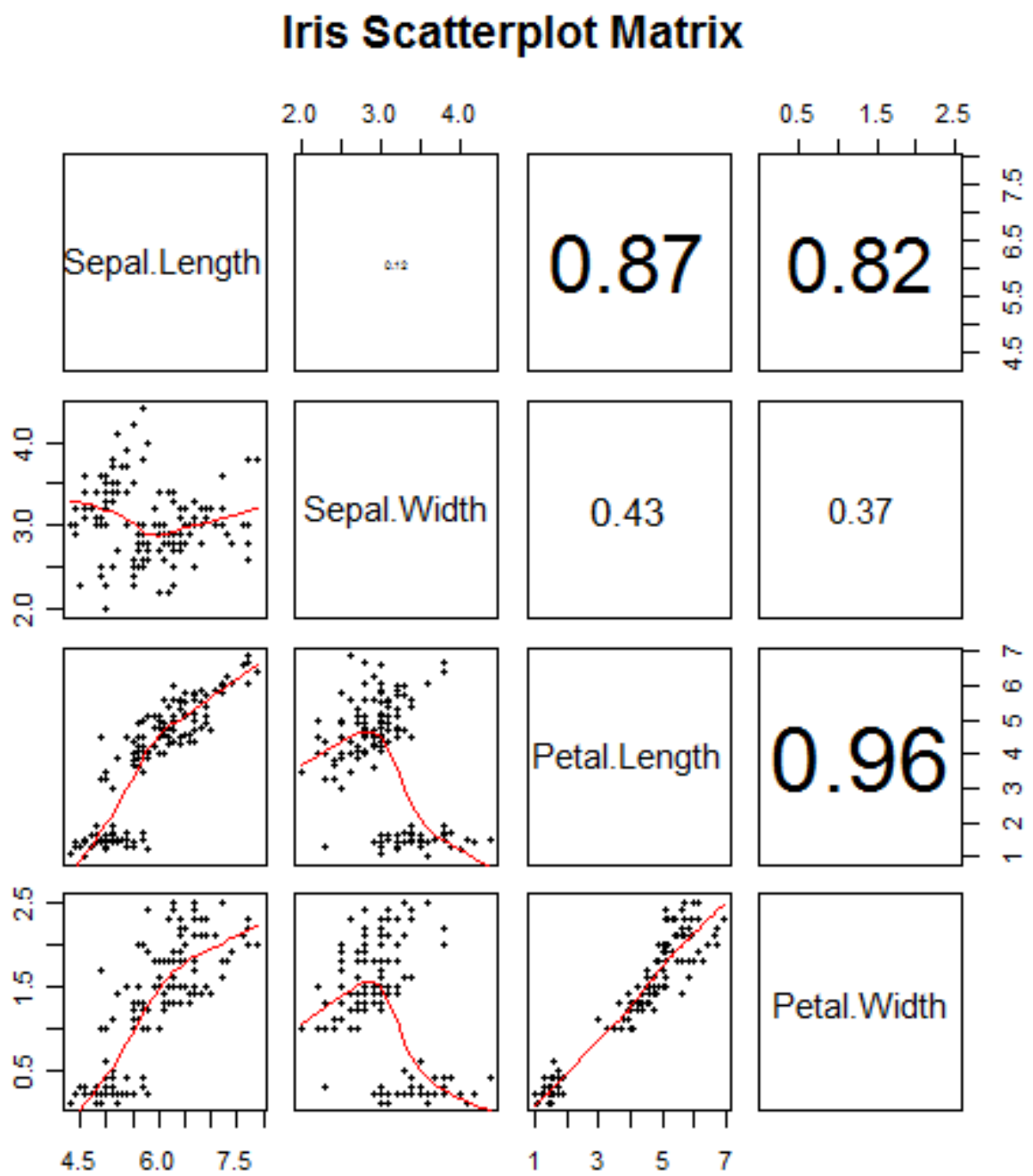
Figure 6.6 Examples of some frequency distributions with their cumulative distributions plotted with the ordinate in normal probability scale. (See Boxes 6.3 and 6.4 for


The Chi Square Distribution with 5, 10 and 15 degrees of freedom
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
0
5
10
15
20
25
df=5
df=10
df=15



Positive Correlation

Negative Corre


Iris Scatterplot Matrix
Sepal.Length
Sepal.Width
Petal.Length
Petal.Width
0.87
0.82
0.43
0.37
0.96
2.0 3.0 4.0
0.5 1.5 2.5
4.5 5.5 6.5 7.5
2.0 3.0 4.0
1 2 3 4 5 6 7
0.5 1.5 2.5
4.5 6.0 7.5
1 3 5 7

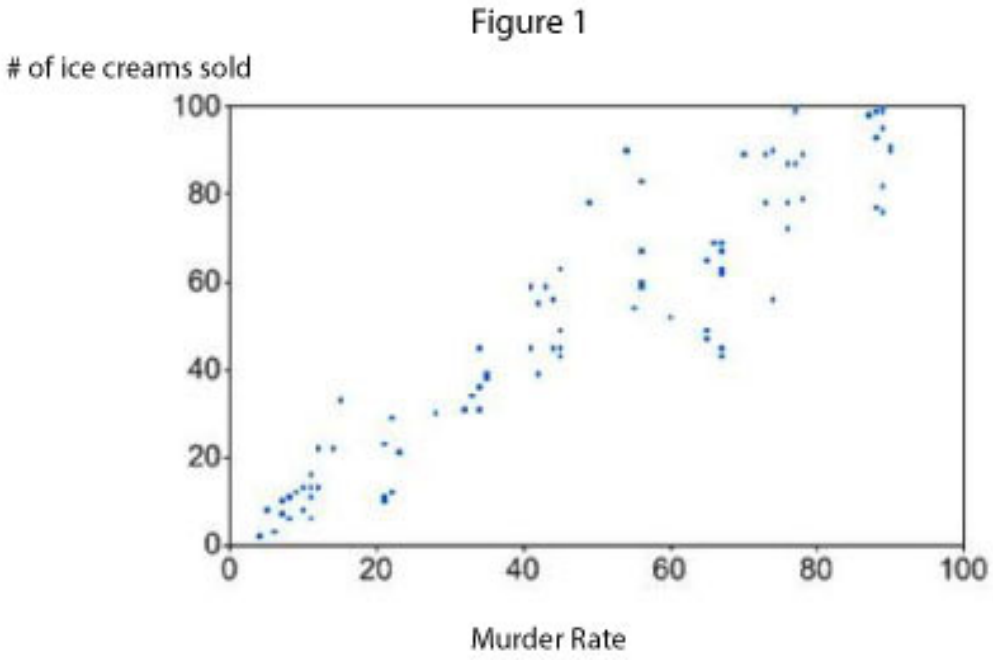
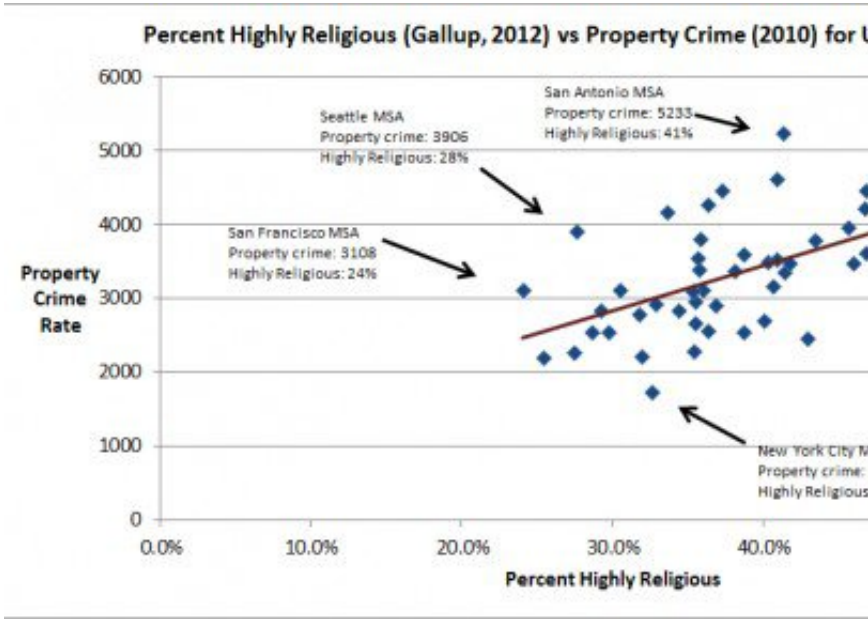
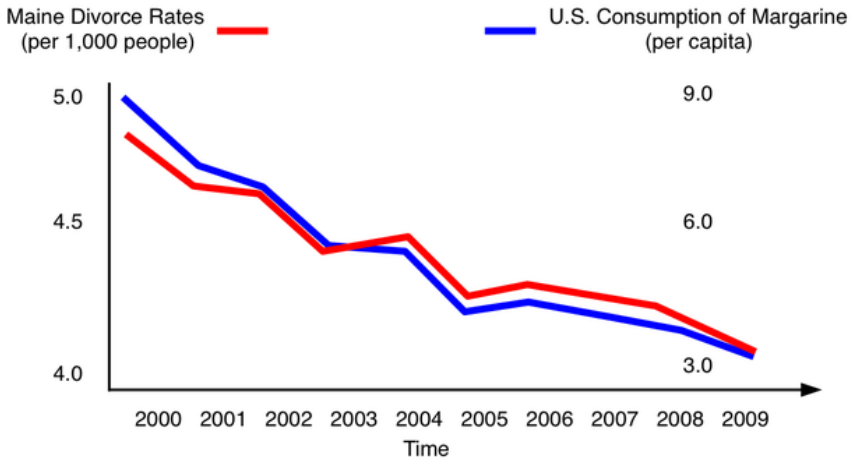
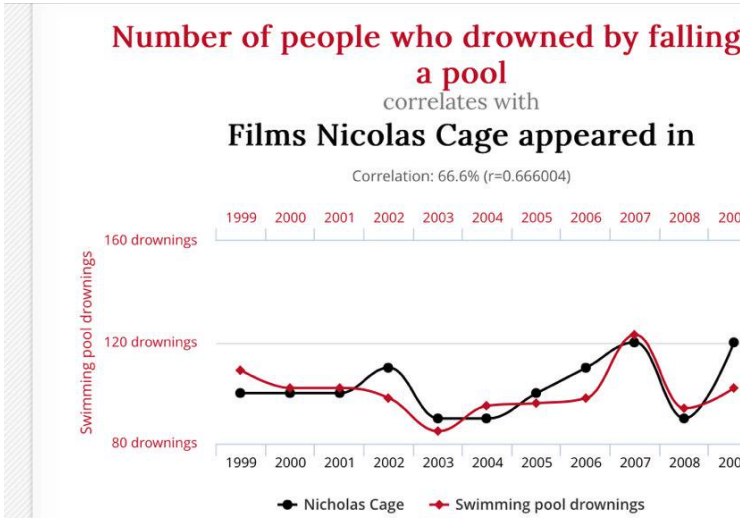
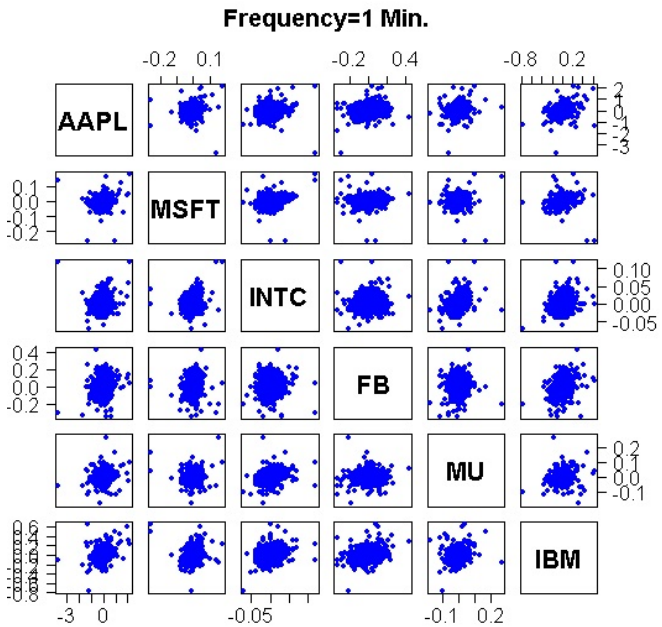
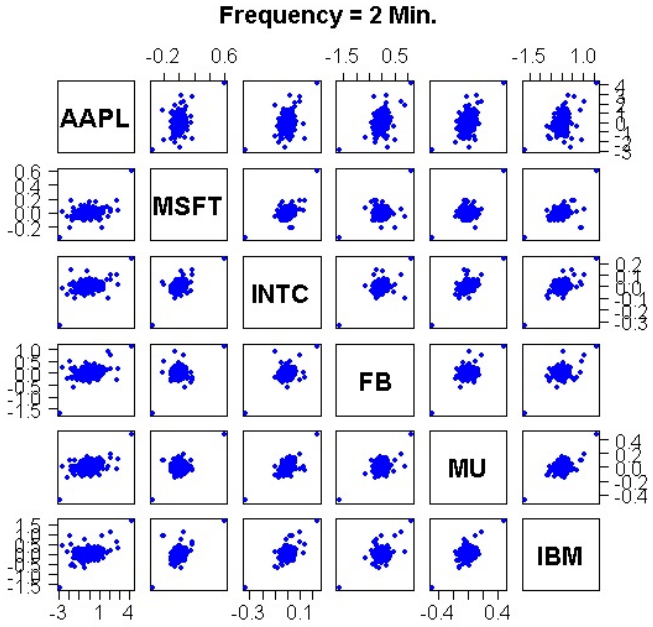
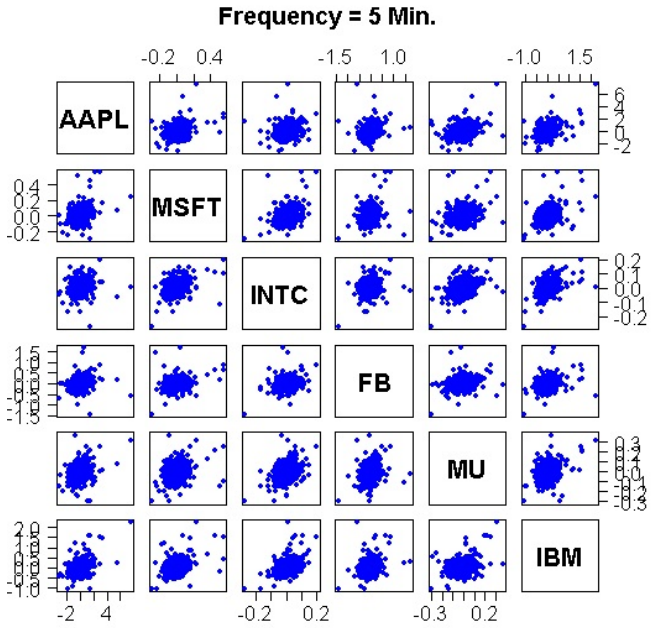
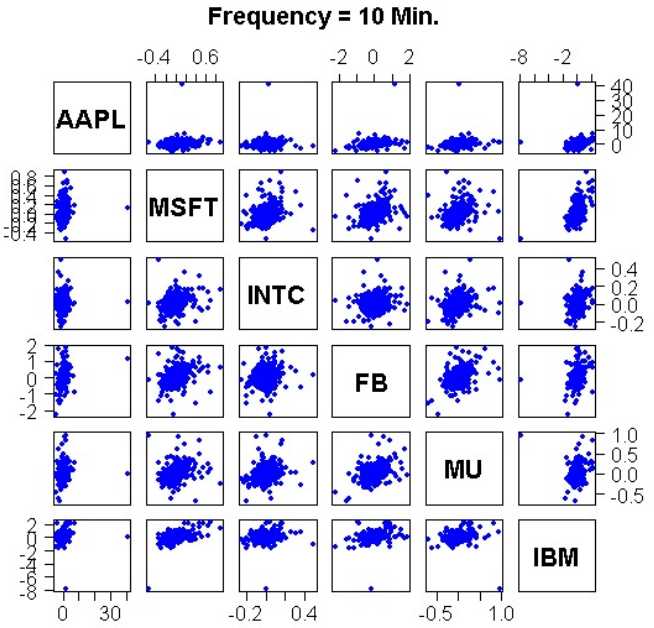


Figure 1
# of ice creams sold
100
80
60
40
20
0
0
20
40
60
80
100
Murder Rate


Percent Highly Religious (Gallup, 2012) vs Property Crime (2010) for U
6000
5000
4000
3000
2000
1000
0
Property Crime Rate
Seattle MSA
Property crime: 3906
Highly Religious: 28%
San Antonio MSA
Property crime: 5233
Highly Religious: 41%
San Francisco MSA
Property crime: 3108
Highly Religious: 24%
0.0%
10.0%
20.0%
30.0%
40.0%
Percent Highly Religious


Maine Divorce Rates
(per 1,000 people)
U.S. Consumption of Margarine
(per capita)
5.0
4.5
4.0
9.0
6.0
3.0
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009
Time


Number of people who drowned by falling
a pool
correlates with
Films Nicolas Cage appeared in
Correlation: 66.6% (r=0.666004)
1999 2000 2001 2002 2003 2004 2005 2006 2007 2008
160 drownings
120 drownings
80 drownings
Swimming pool drownings
Nicholas Cage
Swimming pool drownings

The Multiple-Comparisons Problem