Unit 4

Answer:

1.
Treasury bond: Initial investment = ($20,000.00)(0.45) = $9,000.00

Year 1 Value	($9,000.00)(1.0435) = $9,391.50
Year 2 Value	($9,391.50)(1.0435) = $9,800.03
Year 3 Value	($9,800.03)(1.0435) = $10,226.33

CD: Initial investment = ($20,000.00)(0.15) = $3,000.00

Year 1 Value	($3,000.00)(1.0375) = $3,112.50
Year 2 Value	($3,112.50)(1.0375)= $3,229.22
Year 3 Value	($3,229.22)(1.0375) = $3,350.32

Stock: Initial investment = ($20,000.00)(0.20) = $4,000.00

Year 1 Value	($4,000.00)(1.08) = $4,320.00
Year 2 Value	($4,320.00)(0.96) = $4,147.20
Year 3 Value	($4,147.20)(1.06) = $4,396.03

Savings: Initial investment = ($20,000.00)(0.20) = $4,000.00

Year 1 Value	($4,000.00)(1.029) = $4,116.00
Year 2 Value	($4,116.00)(1.029) = $4,235.36
Year 3 Value	($4,235.36)(1.029) = $4,358.19

2. Gains

Treasury Bond	$10,226.33 - $9,000.00 = $1,226.33
CD	$3,350.32 - $3,000.00 = $350.32
Stock	$4,396.03 - $4,000.00 = $396.03
Savings	$4,358.19 - $4,000.00 = $358.19
Total Gains	**$2,330.87**

3.
Treasury bond: Initial investment = ($20,000.00)(0.20) = $4,000.00

Year 1 Value	($4,000.00)(1.0435) = $4,174.00
Year 2 Value	($4,174.00)(1.0435) = $4,355.57
Year 3 Value	($4,355.57)(1.0435) = $4,545.04

Stock: Initial investment = ($20,000.00)(0.45) = $9,000.00

Year 1 Value	($9,000.00)(1.08) = $9,720.00
Year 2 Value	($9,720.00)(0.96) = $9,331.20
Year 3 Value	($9,331.20)(1.06) = $9,891.07

Gains (New Scenario)

Treasury Bond	$4,545.04 - $4,000.00 = $545.04
CD	$3,350.32 - $3,000.00 = $350.32
Stock	$9,891.07 - $9,000.00 = $891.07
Savings	$4,358.19 - $4,000.00 = $358.19
Total Gains	**$2,144.62**

The total gain is less when you invest more in the stocks than in the treasury bonds.