Chapter 6

4. a. The expected cash flow is: $135,000.

present value of the portfolio is: $118,421

b.

Therefore, *E*(*r*) =14%.

c. the required return is: 18%

The present value of the portfolio is now: $114,407

5. *A* must be less than 3.09 for the risky portfolio to be preferred to bills.

13. Expected return = (0.7 × 18%) + (0.3 × 8%) = 15%

Standard deviation = 0.7 × 28% = 19.6%

|  |  |  |  |
| --- | --- | --- | --- |
| 14. | Investment proportions: |  | 30.0% in T-bills |
|  |  |  | 17.5% in Stock A |
|  |  |  | 22.4% in Stock B |
|  |  |  | 30.1% in Stock C |

15. Your reward-to-volatility (Sharpe) ratio: 0.3571

Client's reward-to-volatility (Sharpe) ratio: 0.3571

16.



17. a. In order to have a portfolio with expected rate of return equal to 16%, the client must invest 80% of total funds in the risky portfolio and 20% in T-bills.

b.

|  |  |  |
| --- | --- | --- |
| Client’s investment proportions: | | 20.0% in T-bills |
|  |  | 20.0% in Stock A |
|  |  | 25.6% in Stock B |
|  |  | 34.4% in Stock C |

c. σ*C* = 22.4%