

šZμ 5tEvd%o À Ñ•Á ρ 0

1. $\frac{1}{2} \times 100 = 50$ (50% of 100)
2. $\frac{1}{3} \times 100 = 33.33$ (33.33% of 100)
3. $\frac{1}{4} \times 100 = 25$ (25% of 100)
4. $\frac{1}{5} \times 100 = 20$ (20% of 100)
5. $\frac{1}{6} \times 100 = 16.67$ (16.67% of 100)
6. $\frac{1}{7} \times 100 = 14.29$ (14.29% of 100)
7. $\frac{1}{8} \times 100 = 12.5$ (12.5% of 100)
8. $\frac{1}{9} \times 100 = 11.11$ (11.11% of 100)
9. $\frac{1}{10} \times 100 = 10$ (10% of 100)
10. $\frac{1}{11} \times 100 = 9.09$ (9.09% of 100)
11. $\frac{1}{12} \times 100 = 8.33$ (8.33% of 100)
12. $\frac{1}{13} \times 100 = 7.69$ (7.69% of 100)
13. $\frac{1}{14} \times 100 = 7.14$ (7.14% of 100)
14. $\frac{1}{15} \times 100 = 6.67$ (6.67% of 100)
15. $\frac{1}{16} \times 100 = 6.25$ (6.25% of 100)
16. $\frac{1}{17} \times 100 = 5.88$ (5.88% of 100)
17. $\frac{1}{18} \times 100 = 5.56$ (5.56% of 100)
18. $\frac{1}{19} \times 100 = 5.26$ (5.26% of 100)
19. $\frac{1}{20} \times 100 = 5$ (5% of 100)
20. $\frac{1}{21} \times 100 = 4.76$ (4.76% of 100)
21. $\frac{1}{22} \times 100 = 4.55$ (4.55% of 100)
22. $\frac{1}{23} \times 100 = 4.35$ (4.35% of 100)
23. $\frac{1}{24} \times 100 = 4.17$ (4.17% of 100)
24. $\frac{1}{25} \times 100 = 4$ (4% of 100)
25. $\frac{1}{26} \times 100 = 3.85$ (3.85% of 100)
26. $\frac{1}{27} \times 100 = 3.7$ (3.7% of 100)
27. $\frac{1}{28} \times 100 = 3.57$ (3.57% of 100)
28. $\frac{1}{29} \times 100 = 3.45$ (3.45% of 100)
29. $\frac{1}{30} \times 100 = 3.33$ (3.33% of 100)
30. $\frac{1}{31} \times 100 = 3.23$ (3.23% of 100)
31. $\frac{1}{32} \times 100 = 3.13$ (3.13% of 100)
32. $\frac{1}{33} \times 100 = 3.03$ (3.03% of 100)
33. $\frac{1}{34} \times 100 = 2.94$ (2.94% of 100)
34. $\frac{1}{35} \times 100 = 2.86$ (2.86% of 100)
35. $\frac{1}{36} \times 100 = 2.78$ (2.78% of 100)
36. $\frac{1}{37} \times 100 = 2.71$ (2.71% of 100)
37. $\frac{1}{38} \times 100 = 2.63$ (2.63% of 100)
38. $\frac{1}{39} \times 100 = 2.56$ (2.56% of 100)
39. $\frac{1}{40} \times 100 = 2.5$ (2.5% of 100)
40. $\frac{1}{41} \times 100 = 2.44$ (2.44% of 100)
41. $\frac{1}{42} \times 100 = 2.38$ (2.38% of 100)
42. $\frac{1}{43} \times 100 = 2.33$ (2.33% of 100)
43. $\frac{1}{44} \times 100 = 2.27$ (2.27% of 100)
44. $\frac{1}{45} \times 100 = 2.22$ (2.22% of 100)
45. $\frac{1}{46} \times 100 = 2.17$ (2.17% of 100)
46. $\frac{1}{47} \times 100 = 2.13$ (2.13% of 100)
47. $\frac{1}{48} \times 100 = 2.08$ (2.08% of 100)
48. $\frac{1}{49} \times 100 = 2.04$ (2.04% of 100)
49. $\frac{1}{50} \times 100 = 2$ (2% of 100)
50. $\frac{1}{51} \times 100 = 1.96$ (1.96% of 100)
51. $\frac{1}{52} \times 100 = 1.92$ (1.92% of 100)
52. $\frac{1}{53} \times 100 = 1.89$ (1.89% of 100)
53. $\frac{1}{54} \times 100 = 1.85$ (1.85% of 100)
54. $\frac{1}{55} \times 100 = 1.82$ (1.82% of 100)
55. $\frac{1}{56} \times 100 = 1.79$ (1.79% of 100)
56. $\frac{1}{57} \times 100 = 1.75$ (1.75% of 100)
57. $\frac{1}{58} \times 100 = 1.72$ (1.72% of 100)
58. $\frac{1}{59} \times 100 = 1.69$ (1.69% of 100)
59. $\frac{1}{60} \times 100 = 1.67$ (1.67% of 100)
60. $\frac{1}{61} \times 100 = 1.64$ (1.64% of 100)
61. $\frac{1}{62} \times 100 = 1.61$ (1.61% of 100)
62. $\frac{1}{63} \times 100 = 1.59$ (1.59% of 100)
63. $\frac{1}{64} \times 100 = 1.56$ (1.56% of 100)
64. $\frac{1}{65} \times 100 = 1.54$ (1.54% of 100)
65. $\frac{1}{66} \times 100 = 1.52$ (1.52% of 100)
66. $\frac{1}{67} \times 100 = 1.49$ (1.49% of 100)
67. $\frac{1}{68} \times 100 = 1.47$ (1.47% of 100)
68. $\frac{1}{69} \times 100 = 1.45$ (1.45% of 100)
69. $\frac{1}{70} \times 100 = 1.43$ (1.43% of 100)
70. $\frac{1}{71} \times 100 = 1.41$ (1.41% of 100)
71. $\frac{1}{72} \times 100 = 1.39$ (1.39% of 100)
72. $\frac{1}{73} \times 100 = 1.37$ (1.37% of 100)
73. $\frac{1}{74} \times 100 = 1.35$ (1.35% of 100)
74. $\frac{1}{75} \times 100 = 1.33$ (1.33% of 100)
75. $\frac{1}{76} \times 100 = 1.32$ (1.32% of 100)
76. $\frac{1}{77} \times 100 = 1.3$ (1.3% of 100)
77. $\frac{1}{78} \times 100 = 1.28$ (1.28% of 100)
78. $\frac{1}{79} \times 100 = 1.27$ (1.27% of 100)
79. $\frac{1}{80} \times 100 = 1.25$ (1.25% of 100)
80. $\frac{1}{81} \times 100 = 1.23$ (1.23% of 100)
81. $\frac{1}{82} \times 100 = 1.22$ (1.22% of 100)
82. $\frac{1}{83} \times 100 = 1.2$ (1.2% of 100)
83. $\frac{1}{84} \times 100 = 1.19$ (1.19% of 100)
84. $\frac{1}{85} \times 100 = 1.18$ (1.18% of 100)
85. $\frac{1}{86} \times 100 = 1.16$ (1.16% of 100)
86. $\frac{1}{87} \times 100 = 1.15$ (1.15% of 100)
87. $\frac{1}{88} \times 100 = 1.14$ (1.14% of 100)
88. $\frac{1}{89} \times 100 = 1.12$ (1.12% of 100)
89. $\frac{1}{90} \times 100 = 1.11$ (1.11% of 100)
90. $\frac{1}{91} \times 100 = 1.1$ (1.1% of 100)
91. $\frac{1}{92} \times 100 = 1.09$ (1.09% of 100)
92. $\frac{1}{93} \times 100 = 1.08$ (1.08% of 100)
93. $\frac{1}{94} \times 100 = 1.06$ (1.06% of 100)
94. $\frac{1}{95} \times 100 = 1.05$ (1.05% of 100)
95. $\frac{1}{96} \times 100 = 1.04$ (1.04% of 100)
96. $\frac{1}{97} \times 100 = 1.03$ (1.03% of 100)
97. $\frac{1}{98} \times 100 = 1.02$ (1.02% of 100)
98. $\frac{1}{99} \times 100 = 1.01$ (1.01% of 100)
99. $\frac{1}{100} \times 100 = 1$ (1% of 100)

1. **Introduction** (10%)
The purpose of this assignment is to evaluate your understanding of the concepts of risk and return. You are required to analyze the relationship between risk and return for a portfolio of assets. The assignment is divided into three parts: (a) identifying the risk and return of individual assets, (b) calculating the risk and return of a portfolio, and (c) discussing the implications of the results.

A. Consider the following data for two assets, A and B, over a period of 10 years. The data is presented in the table below. The first column shows the return for asset A, and the second column shows the return for asset B. The third column shows the return for the market portfolio. The fourth column shows the return for the risk-free rate. The fifth column shows the return for the market portfolio minus the return for the risk-free rate. The sixth column shows the return for asset A minus the return for the risk-free rate. The seventh column shows the return for asset B minus the return for the risk-free rate.

Year | Return A | Return B | Return M | Return Rf | Return M - Rf | Return A - Rf | Return B - Rf
1 | 10% | 12% | 8% | 5% | 3% | 5% | 7%
2 | 15% | 18% | 12% | 5% | 7% | 10% | 13%
3 | 20% | 25% | 15% | 5% | 10% | 15% | 20%
4 | 25% | 32% | 18% | 5% | 13% | 20% | 27%
5 | 30% | 40% | 22% | 5% | 17% | 25% | 35%
6 | 35% | 48% | 25% | 5% | 20% | 30% | 43%
7 | 40% | 55% | 28% | 5% | 23% | 35% | 50%
8 | 45% | 62% | 30% | 5% | 25% | 40% | 57%
9 | 50% | 70% | 32% | 5% | 27% | 45% | 65%
10 | 55% | 78% | 35% | 5% | 30% | 50% | 73%

A. Calculate the expected return and standard deviation for each asset. **B.** Calculate the expected return and standard deviation for the market portfolio. **C.** Calculate the beta coefficient for each asset. **D.** Calculate the risk premium for each asset. **E.** Calculate the risk premium for the market portfolio. **F.** Calculate the risk premium for the risk-free rate.

2. **Conclusion** (10%)
The results of the analysis show that the market portfolio has a higher expected return and a higher standard deviation than the individual assets. The beta coefficient for each asset is less than 1, indicating that the assets are less volatile than the market portfolio. The risk premium for each asset is positive, indicating that the assets are riskier than the risk-free rate.

