

UNIVERSITY OF TEXAS AT AUSTIN

Quiz #13

Break-even analysis.

Problem 13.1. (5 points) Consider a two-year project, where the cost of capital is 5%. There are only three cash flows for this project:

- The first occurs at $t = 0$, and is -100 .
- The second occurs at $t = 1$, and is 50 .
- The third occurs at $t = 2$, and is X .

Determine X , the level of the cash flow at $t = 2$, that leads to the project breaking even.

- (a) \$50
- (b) \$57.75
- (c) \$60
- (d) \$63.25
- (e) None of the above.

Problem 13.2. (5 points) Consider a two-year project, where the cost of capital is 4%. There are only three cash flows for this project:

- The first occurs at $t = 0$, and is -100 .
- The second occurs at $t = 1$, and is -50 .
- The third occurs at $t = 2$, and is X .

Determine X , the level of the cash flow at $t = 2$, that leads to the project breaking even.

- (a) -\$160.16
- (b) -\$56.16
- (c) \$56.16
- (d) \$160.16
- (e) None of the above.

Problem 13.3. (5 points) Consider a two-year project. There are only three cash flows for this project:

- The first occurs at $t = 0$, and is -100 .
- The second occurs at $t = 1$, and is 40 .
- The third occurs at $t = 2$, and is 68.25 .

Determine r , the cost of capital, that leads to the project breaking even.

- (a) 0.04
- (b) 0.045
- (c) 0.05
- (d) 0.055
- (e) None of the above.