## 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.