

Midterm Examination 1 (45 minutes)

Allowed materials: Interest table, page of formulas and a calculator

All steps must be shown in full.

Problem 1 (40%):

- (a) Given a rate of interest of 10%, and the cash flow shown in the table below, find its present value, P (time = 0).
- (b) Repeat part (a), using another approach.

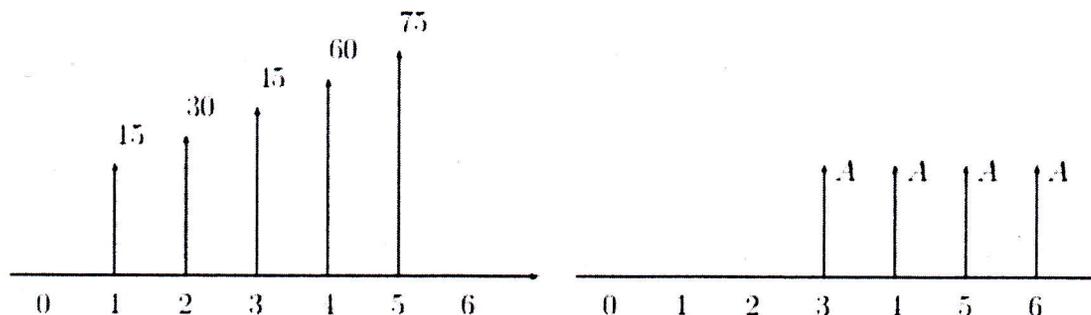
Time	Amount
1	100
2	100
3	100
4	150
5	200
6	0
7	300

Problem 2 (30%):

You want to put money away each year in a "dream car" fund. The car you want to buy will cost \$60,000 in 8 years. You are going to put aside \$6,000 each year for 8 years. At what rate of interest must you invest your money so as to achieve your goal of having enough to purchase the car in 8 years?

Problem 3 (30%):

Two cash flows are shown below. The interest rate is 6%, compounding annually.



- a) What is the present value of cash flows 1 (the one on the left)?
- b) For what value of A are these two sets of cash flows equivalent?
- c) What is the future value of the cash flows 2 (the one on the right) at time 6?