

1. What is the maximum amount a firm should pay for a project that will return \$15,000 annually for 5 years if the opportunity cost is 10%?
  
2. A project that requires an initial investment of \$1000, and is expected to provide \$700 in the following two years. Do you recommend this investment if the discount rate is 15%?
  
3. Which mutually exclusive project would you select, if both are priced at \$1,000 and your required return is 15%: Project A with three annual cash flows of \$1,000; or Project B, with 3 years of zero cash flow followed by 3 years of \$1,500 annually?
  
4. What is the profitability index for a project costing \$40,000 and returning \$15,000 annually for 4 years at an opportunity cost of capital of 12%?
  
5. Calculate the payback period, NPV, and PI for a project with a \$20,000 initial cost, cash inflows of \$6,667 per year for 6 years, and a discount rate of 15%
  
6. If a project's IRR is 13% and the project provides annual cash flows of \$15,000 for 4 years, how much did the project cost?
  
7. The following questions refer to the projects which can be seen below

<b>Year</b>	<b>Project A</b>	<b>Project B</b>
0	-\$200	-\$200
1	80	100
2	80	100
3	80	100
4	80	

- A- If the opportunity cost of capital is 11%, which of these projects is worth pursuing?
- B- Suppose that you can choose only one of these projects. Which would you choose? The discount rate is still 11%
- C- If the opportunity cost of capital is 11 percent, what is the profitability index for each project? Does the profitability index rank the projects correctly?.
- D- What is the payback period for each project?.
- E- Which project would you choose if the opportunity cost of capital was 16%?
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8. A proposed nuclear power plant will cost \$2.2 billion to build and then will produce cash flows of \$300 million a year for 15 years. After that period (in year 15), it must be decommissioned at a cost of \$900 million. If the discount rate is 5%, should we build it? What if the discount rate is 18%?