

# [Managerial accounting essay sample](https://assignbuster.com/managerial-accounting-essay-sample-essay-samples/)

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Question #1   
Consider the following potential investment, which has the same risk as the firm’s other projects: TimeCash Flow   
0-$95, 000   
1$20, 000   
2$24, 000   
3$24, 000   
4$24, 000   
5$24, 000   
6$32, 000

a)What are the investment’s payback period, IRR, and NPV, assuming the firm’s WACC is 10%.

b)If the firm requires a payback period of less than 5 years, should this project be accepted? Answer:   
Yes it should accept the project because the payback period for the project meets the less than five years requirement with 4. 13 years.

c)Based on the IRR and NPV rules, should this project be accepted? Be sure to justify your choice. Answer: Yes the project should be accepted based on the IRR of 13% the company will get back on its investment and also the positive NPV of $10, 406 of the future cash flow of the project. However, the IRR is not compared against any other project so the firm cannot rely on this rule as it should the NPV.

d)Which of the decision rules (payback, NPV, or IRR) do you think is the best rule for a firm to use when evaluating projects? Be sure to justify your choice. Answer: Of the three decision rules, the NPV is the best rule for a firm to use when evaluating projects for the following reasons:

a)It takes the time value of money into consideration   
b)It takes cost of capital (WACC) into consideration also   
c)It includes all cash flows in the decision   
d)It has the ability to incorporate multiple discount rates

Question #2   
A firm believes it can generate an additional $250, 000 per year in revenues for the next 5 years if it replaces existing equipment that is no longer usable with new equipment that costs $240, 000. The firm expects to be able to sell the new equipment when it is finished using it (after 5 years) for $10, 000. The existing equipment has a book value of $20, 000 and a market value of $12, 000. Variable costs are expected to total 70% of revenue. The additional sales will require an initial investment in net working capital of $15, 000, which is expected to be recovered at the end of the project (after 5 years). Assume the firm uses straight line depreciation, its marginal tax rate is 30%, and its weighted-average cost of capital is 10%.

a) How much value will this new equipment create for the firm?   
The new equipment will create additional $66, 300 for the firm for each of the five years.

b) At what discount rate will this project break even?   
From the table below, the project will break even at a discount rate of 12%   
c) Should the firm purchase the new equipment? Be sure to justify your recommendation.   
Because this project will be adding value to the company, based on its positive NPV, it should be accepted.

Question #3   
Your company is interested in having a new facility constructed. The contractor expects that it will take approximately 3 years to complete the building. The contractor has offered you three payment plans for the building. They are as follows:

Time Plan 1Plan 2Plan 3   
Today$100, 000$820, 000$500, 000   
1 year from now$1, 100, 000$820, 000$0   
2 years from now$1, 100, 000$820, 000$1, 400, 000   
3 years from now$1, 100, 000$820, 000$1, 400, 000

a) The CFO of your company has asked you to provide recommendation concerning which payment plan to accept. What is your recommendation? Assume your weighted-average cost of capital is 10%.

Answer: Based on the NPV of the three payment plans calculated above, I would recommend plan 3 that has the lowest NPV.

b) Besides cost, what other factors should you take into consideration when deciding which payment plan to accept?

Answer: other factors to consider when deciding on an acceptable payment plan are   
a)NPV of each payment   
b)Cash flows or cash availability   
c)Average cost of capital