Practice: RETURN AND FINANCIAL LEVERAGE ANALYSIS PROBLEMS

1.- If the economic rate of return of a company is 40 percent and its asset turnover is 2, please find its sales margin.

2.- The size of the assets for PATOSA company € 10,000,000, which are funded in 30% equity and the remaining by debt. The forecast for next year is:
Sales: 1.000 units
Fixed Costs: 1,000,000 € / year
Variable costs: 200 € / unit
what is the selling price that PATOSA should set to guarantee at least an economic rate of return (ERR) of 10%?

3.- Companies BUTANOL, SA and methanol, SA are competitors in the Spanish market of energetic supplies. Their data as of December 31st, 2018 are those listed on the table below:

	METANOL, S.A.	BUTANOL, S.A.
Sales revenue	9*	6
Production costs (excluding interest)	7,50	4,60
Total assets	9,50	6,70

* All amounts are in millions of euros.

It's ask to:

(a) Calculate the economic rate of return, the sales margin and assets turnover for both companies.

(b) The average cost of debt for both companies is 18 percent. How is the "leverage effect" of these companies (amplifier / gearbox)? How these businesses could increase their financial rate of return?

4.- Calculate the sales margin for company "BOMBÓN" considering the following data:

Sales Revenue	30.000.000€
Cost of debt	17%
Financial Profitability	19%
Assets turnover	3
Financial expenses	425.000 €

5.- The equity capital of the company AGAPITO is worth €7,500, with a financial rate of return of 24%. Earnings before interest and taxes (EBIT) are €2,000. Assuming that the cost of capital is 16%, what kind of financial leverage has this company?

6.- Several reports on a particular business show a financial rate of return of 25%, while the difference between the economic rate of return and the cost of capital is six percentage points. Additionally, we know that the company´s operating profit margin (SALES MARGIN) is 0.48. Assuming that 40% of the company´s assets is financed by debt capital, what is the asset turnover? Explain the financial leverage of this business.

7.- Company X presents the following operating accounts corresponding to two consecutive periods (expressed in euros):

Year 0

Sales...............................200.000

Raw material.........................18.000
Personnel expenses..................50.000
Financial expenses...................15.000

Positive year result................117.000

Year 1

Sales...............................264.000

Raw material.........................18.000
Personnel expenses..................58.300
Financial expenses...................10.000

Positive year result.................177.700

We also know that the company´s total assets were worth €1,000,000 for year 0 and €1,200,000 for year 1. The cost of capital dropped from 10% to 5% over the period considered. Calculate the economic and financial return and the type of leverage for both periods.

8.- Company A has reported the following data:
Revenue: €100,000
Raw material costs: €20,000
Personnel expenses: €30.000
Financial expenses: €4.000
Financial return: 20%
Cost of debt capital: 10%

Calculate the company´s economic rate of return and the type of leverage.