P13-119

(Ignore income taxes in this problem.) Tranter, Inc., is considering a project that would have a ten-year life and would require a $1,200,000 investment in equipment. At the end of ten years, the project would terminate and the equipment would have no salvage value. The project would provide net operating income each year as follows:

Sales		$1,700,000
Variable expenses		1,200,000
Contribution margin		500,000
Fixed expenses:		
Fixed out-of-pocket cash expenses	$200,000	
Depreciation	120,000	320,000
Net operating income		$ 180,000

All of the above items, except for depreciation, represent cash flows. The company's required rate of return is 12%.

Required:

a. Compute the project's net present value.
b. Compute the project's internal rate of return to the nearest whole percent.
c. Compute the project's payback period.
d. Compute the project's simple rate of return.

P 13-136

(Ignore income taxes in this problem.) The management of an amusement park is considering purchasing a new ride for $40,000 that would have a useful life of 10 years and a salvage value of $4,000. The ride would require annual operating costs of $19,000 throughout its useful life. The company's discount rate is 8%. Management is unsure about how much additional ticket revenue the new ride would generate-particularly because customers pay a flat fee when they enter the park that entitles them to unlimited rides. Hopefully, the presence of the ride would attract new customers.

Required:

How much additional revenue would the ride have to generate per year to make it an attractive investment?

P13-138

(Ignore income taxes in this problem.) Ahlman Corporation is considering the following three investment projects:

	Project A	Project B	Project C
Investment required.....	$33,000	$47,000	$77,000
Present value of cash inflows	$39,270	$48,410	$89,320

Required:

Rank the investment projects using the project profitability index. Show your work

P13-140

(Ignore income taxes in this problem.) Brewer Company is considering purchasing a machine that would cost $537,600 and have a useful life of 9 years. The machine would reduce cash operating costs by $82,708 per year. The machine would have a salvage value of $107,520 at the end of the project.

Required:

a. Compute the payback period for the machine.
b. Compute the simple rate of return for the machine.