**ICA 6.1\_Ch 6 Name: Total: 10 points**

**Besides marking the correct answers and submitting this document, please upload an excel file showing work for questions 4-9.**

1. Assume you spent $800 last week repairing your car. Now a new problem is occurring and you are trying to decide whether to fix the car or trade it in for a newer model. In analyzing the situation, the $800 repair expense is a(n)\_\_\_\_\_\_\_\_\_\_\_\_\_cost.
2. Opportunity
3. Fixed
4. Incremental
5. Sunk
6. relevant
7. A decrease in a firm’s current cash flows resulting from the implementation of a new project is referred to as:
8. salvage value expenses.
9. net working capital expenses.
10. sunk costs.
11. opportunity costs.
12. erosion costs.
13. The cash flows of a project should:
14. be computed on a pretax basis.
15. include all sunk costs and opportunity costs.
16. include all incremental and opportunity costs.
17. be applied to the year when the related expense or income is recognized by GAAP.
18. include all financing costs related to new debt acquired to finance the project.
19. You own a house that you rent for $1,225 per month. The maintenance expenses on the house average $225 per month. The house cost $224,000 when you purchased it 4 years ago. A recent appraisal on the house valued it at $246,000. If you sell the house you will incur $19,680 in real estate fees. The annual property taxes are $2,750. You are deciding whether to sell the house or convert it for your own use as a professional office. What value should you place on this house when analyzing the option of using it as a professional office?
20. $222,120
21. $224,000
22. $246,000
23. $0
24. $226,320
25. Bubbly Waters currently sells 400 Class A spas, 550 Class C spas, and 300 deluxe model spas each year. The firm is considering adding a mid-class spa and expects that if it does, it can sell 475 units per year. However, if the new spa is added, Class A sales are expected to decline to 275 units while the Class C sales are expected to increase to 575. The sales of the deluxe model will not be affected. Class A spas sell for an average of $13,900 each. Class C spas are priced at $7,000 and the deluxe models sell for $18,000 each. The new mid-range spa will sell for $9,000. What annual sales figure should you use in your analysis?
26. $5,837,500
27. $4,275,000
28. $2,712,500
29. $1,562,500
30. $6,187,500
31. A company purchased an asset for $3,300,000 that will be used in a 3-year project. The asset is in the 3-year MACRS class. The depreciation percentage each year is 33.33 percent, 44.45 percent, and 14.81 percent, respectively. What is the book value of the equipment at the end of the project?
32. $244,530
33. $733,260
34. $3,055,470
35. $2,200,110
36. $0
37. Power Manufacturing has equipment that it purchased 6 years ago for $2,500,000. The equipment was used for a project that was intended to last for 8 years and was being depreciated over the life of the project. However, due to low demand, the project is being shut down. The equipment was depreciated using the straight-line method and can be sold for $390,000 today. The company's tax rate is 35 percent. What is the after-tax salvage value of the equipment?
38. $431,125
39. $307,750
40. $472,250
41. $526,500
42. $390,000

Annual depreciation = (Work is shown in excel) $312,500  
Book value = $625,000  
Tax refund (due) = $82,250  
After-tax salvage value = $472,250

1. Gateway Communications is considering a project with an initial fixed assets cost of $1.48 million that will be depreciated straight-line to a zero book value over the 9-year life of the project. At the end of the project the equipment will be sold for an estimated $247,000. The project will not change sales but will reduce operating costs by $413,000 per year. The tax rate is 35 percent and the required return is 12.2 percent. The project will require $55,500 in net working capital, which will be recouped when the project ends. What is the project's NPV?
2. $253,556
3. $265,081
4. $300,886
5. $312,921
6. $323,352

Use excel (can use following hints)

Year 0 CF = −$1,480,000 − 55,500 = −$1,535,500  
  
Annual OCF = $326,005.56  
Year 9 CF (without OCF) = $76,668.78  
NPV = $265,081.04

1. If the owner earns 5% interest on her investments, determine the equivalent annual cost of owning a private jet with the following costs (EOY = end of year).

Initial down payment = $22,000

Annual payments = $55,000, EOY1–EOY4

Prepaid insurance = $15,000, growing 8% annually

Fuel & minor maintenance = $20,000, growing 10% annually

Part replacements = $6,500 at EOY4 & $8,000 at EOY8

Major maintenance = $24,000 at EOY5

Salvage value = $37,500 at EOY9

Answer for Q9 and shown work is in the EXCEL spreadsheet attached. 

**Thank you**