Violet Sky Shipping is evaluating a 1-year project that would involve an initial investment in equipment of 30,400 dollars and an expected cash flow of 31,700 dollars in 1 year.  The project has a cost of capital of 2.61 percent and an internal rate of return of 4.28 percent.  If Violet Sky Shipping were to use 30,400 dollars in cash from its bank account to purchase the equipment, the net present value of the project would be 494 dollars.  However, Violet Sky Shipping has no cash in its bank account, so using money from its account is not possible.  Therefore, the firm would need to borrow money to raise the 30,400 dollars.  If Violet Sky Shipping were to borrow money to raise the 30,400 dollars, the interest rate on the loan would be 0.13 percent.  Violet Sky Shipping would receive 30,400 dollars from the bank at the start of the project and would pay 30,440 dollars to the bank in 1 year.  What is the NPV of the project if Violet Sky Shipping borrows 30,400 to pay for the project?

Gomi Waste Disposal is evaluating a project that would require the purchase of a piece of equipment for 164,000 dollars today.  During year 1, the project is expected to have relevant revenue of 112,000 dollars, relevant costs of 35,000 dollars, and relevant depreciation of 15,000 dollars.  Gomi Waste Disposal would need to borrow 164,000 dollars today to pay for the equipment and would need to make an interest payment of 3,000 dollars to the bank in 1 year.  Relevant net income for the project in year 1 is expected to be 39,506 dollars.  What is the tax rate expected to be in year 1?  Answer as a rate in decimal format so that 12.34% would be entered as .1234 and 0.98% would be entered as .0098.

Platinum Water Industrial is evaluating the hair salon project.  During year 1, the hair salon project is expected to have relevant revenue of 684,600 dollars, relevant variable costs of 321,600 dollars, and relevant depreciation of 71,500 dollars.  In addition, Platinum Water Industrial would have one source of fixed costs associated with the hair salon project.  Platinum Water Industrial just signed a deal with Blue Eagle Marketing to develop an advertising campaign for use in the project.  The terms of the deal require Platinum Water Industrial to pay Blue Eagle Marketing either 108,200 dollars in 1 year if the project is pursued or 154,100 dollars in 1 year if the project is not pursued.  Relevant net income for the hair salon project in year 1 is expected to be 165,663 dollars.  What is the tax rate expected to be in year 1?  Answer as a rate in decimal format so that 12.34% would be entered as .1234 and 0.98% would be entered as .0098

Fairfax Pizza is evaluating a project that would require an initial investment in equipment of 400,000 dollars and that is expected to last for 7 years.  MACRS depreciation would be used where the depreciation rates in years 1, 2, 3, and 4 are 45 percent, 33 percent, 16 percent, and 6 percent, respectively.  For each year of the project, Fairfax Pizza expects relevant, incremental annual revenue associated with the project to be 628,000 dollars and relevant, incremental annual costs associated with the project to be 552,000 dollars.  The tax rate is 50 percent.  What is (X plus Y) if X is the relevant operating cash flow (OCF) associated with the project expected in year 1 of the project and Y is the relevant OCF associated with the project expected in year 4 of the project?

Middlefield Motors is evaluating project A, which would require the purchase of a piece of equipment for 332,000 dollars.  During year 1, project A is expected to have relevant revenue of 180,000 dollars, relevant costs of 66,000 dollars, and some depreciation.  Middlefield Motors would need to borrow 332,000 dollars for the equipment and would need to make an interest payment of 26,560 dollars to the bank in year 1.  Relevant net income for project A in year 1 is expected to be 37,000 dollars and operating cash flows for project A in year 1 are expected to be 96,000 dollars.  Straight-line depreciation would be used.  What is the tax rate expected to be in year 1?  Answer as a rate in decimal format so that 12.34% would be entered as .1234 and 0.98% would be entered as .0098.

Platinum Water Media is evaluating a project that would require the purchase of a piece of equipment for 830,000 dollars today.  During year 1, the project is expected to have relevant revenue of 745,700 dollars, relevant costs of 254,200 dollars, and relevant depreciation of 63,000 dollars.  Platinum Water Media would need to borrow 830,000 today for the equipment and would need to make an interest payment of 29,900 dollars to the bank in 1 year.  Relevant operating cash flow for the project in year 1 is expected to be 338,183 dollars.  What is the tax rate expected to be in year 1?  Answer as a rate in decimal format so that 12.34% would be entered as .1234 and 0.98% would be entered as .0098

What is the operating cash flow (OCF) for year 3 of the health club project that Yellow Sand Food should use in its NPV analysis of the project?  Yellow Sand Food operates a(n) vending machine.  The firm is evaluating the health club project, which would involve opening a health club.  During year 3, the health club project is expected to have relevant revenue of 784,800 dollars, relevant variable costs of 315,300 dollars, and relevant depreciation of 84,800 dollars.  In addition, Yellow Sand Food would have one source of fixed costs associated with the health club project.  Yesterday, Yellow Sand Food signed a deal with Blue Eagle Consulting to develop an advertising campaign for use in the health club project.  The terms of the deal require Yellow Sand Food to pay 33,000 dollars to Blue Eagle Blue Eagle in 3 years from today.  The tax rate is 35 percent

What is the operating cash flow for year 4 of project A that Blue Eagle Technology should use in its NPV analysis of the project?  The tax rate is 15 percent.  During year 4, project A is expected to have relevant revenue of 85,000 dollars, relevant variable costs of 23,000 dollars, and relevant depreciation of 10,000 dollars.  In addition, Blue Eagle Technology would have one source of fixed costs associated with the project A.  Yesterday, Blue Eagle Technology signed a deal with Omar Advertising to develop a marketing campaign.  The terms of the deal require Blue Eagle Technology to pay Omar Advertising either 30,000 dollars in 4 years if project A is pursued or 33,000 dollars in 4 years if project A is not pursued.  Finally, the equipment purchased for the project would be sold in 4 years for an expected after-tax cash flow of 5,000 dollars.

Oxygen Optimization is considering the caffeine project, which would involve selling caffeinated oxygen for 1 year.  The firm expects sales of caffeinated oxygen to be 72,000 dollars and associated costs from providing caffeinated oxygen (such as tanks, filters, etc.) to be 35,000 dollars.  The firm believes that sales of regular oxygen, which is currently sold by the firm, would be 31,000 dollars less with the addition of caffeinated oxygen, and that costs associated with regular oxygen to be 26,000 less with the addition of the caffeinated oxygen.  Finally, Oxygen Optimization believes that the introduction of caffeinated oxygen would increase traffic to its facilities, which would increase expected sales of other products (such as masks) by 21,500 dollars more than it would be without the addition of caffeinated oxygen, and increase costs by 14,000 more than it would be without the addition of caffeinated oxygen.  What is the operating cash flow (OCF) for year 1 that Oxygen Optimization should use to analyze the caffeine project?  The tax rate is 40 percent and the cost of capital is 9.64 percent.  Relevant depreciation is expected to be 5,000 dollars.

Middlefield Motors is evaluating project Z.  The project would require an initial investment of 78,000 dollars that would be depreciated to 14,500 dollars over 8 years using straight-line depreciation.  The first annual operating cash flow of 17,500 dollars is expected in 1 year, and annual operating cash flows of 17,500 dollars are expected each year forever.  Middlefield Motors expects the project to have an after-tax terminal value of 309,000 dollars in 5 years.  The tax rate is 20 percent.  What is (X+Y)/Z if X is the project’s relevant expected cash flow for NPV analysis in year 5, Y is the project’s relevant expected cash flow for NPV analysis in year 6, and Z is the project’s relevant expected cash flow for NPV analysis in year 4?  Round your answer to 2 decimal places (for example, 2.89, 0.70, or 1.00)

What is the net present value of the stadium project, which is a 3-year project where Fairfax Pizza would sell pizza in the baseball stadium?  The project would involve an initial investment in equipment of 110,000 dollars today.  To finance the project, Fairfax Pizza would borrow 110,000 dollars.  The firm would receive 110,000 dollars from the bank today and would pay the bank 149,600 dollars in 3 years (consisting of an interest payment of 39,600 dollars and a principal payment of 110,000 dollars).  Cash flows from capital spending would be 0 dollars in year 1, 0 dollars in year 2, and 24,000 dollars in year 3.  Operating cash flows are expected to be 50,600 dollars in year 1, 57,200 dollars in year 2, and -25,300 dollars in year 3.  The cash flow effects from the change in net working capital are expected to be -18,000 dollars at time 0; 8,000 dollars in year 1; -2,000 dollars in year 2; and 12,000 dollars in year 3.  The tax rate is 35 percent.  The cost of capital is 6.19 percent and the interest rate on the loan would be 10.79 percent

Violet Sky Aviation is considering a project that would last for 2 years.  The project would involve an initial investment of 89,000 dollars for new equipment that would be sold for an expected price of 80,000 dollars at the end of the project in 2 years.  The equipment would be depreciated to 24,000 dollars over 5 years using straight-line depreciation.  In years 1 and 2, relevant annual revenue for the project is expected to be 96,000 dollars per year and relevant annual costs for the project are expected to be 24,000 dollars per year.  The tax rate is 50 percent and the cost of capital for the project is 6.78 percent.  What is the net present value of the project?

Litchfield Design is evaluating a 3-year project that would involve buying a new piece of equipment for 430,000 dollars today.  The equipment would be depreciated straight-line to 40,000 dollars over 2 years.  In 3 years, the equipment would be sold for an after-tax cash flow of 52,000 dollars.  In each of the 3 years of the project, relevant revenues are expected to be 259,000 dollars and relevant costs are expected to be 95,000 dollars.  The tax rate is 50 percent and the cost of capital for the project is 10.22 percent.  What is the NPV of the project?

What is the NPV of project A?  The project would require an initial investment in equipment of 32,000 dollars and would last for either 3 years or 4 years (the date when the project ends will not be known until it happens and that will be when the equipment stops working in either 3 years from today or 4 years from today).  Annual operating cash flows of 10,560 dollars per year are expected each year until the project ends in either 3 years or 4 years.  In 1 year, the project is expected to have an after-tax terminal value of 25,204 dollars.  The cost of capital for this project is 6.02 percent

Oxygen Optimization is considering buying a new purification system.  The new system would be purchased today for 15,800 dollars.  It would be depreciated straight-line to 1,200 dollars over 2 years.  In 2 years, the system would be sold and the after-tax cash flow from capital spending in year 2 would be 2,600 dollars.  The system is expected to reduce costs by 4,900 dollars in year 1 and by 11,800 dollars in year 2.  If the tax rate is 50 percent and the cost of capital is 5.28 percent, what is the net present value of the new purification system project?

Fairfax Pizza is considering buying a new oven.  The new oven would be purchased today for 18,600 dollars.  It would be depreciated straight-line to 2,000 dollars over 2 years.  In 2 years, the oven would be sold for an after-tax cash flow of 2,900 dollars.  Without the new oven, costs are expected to be 12,600 dollars in 1 year and 17,700 in 2 years.  With the new oven, costs are expected to be 400 dollars in 1 year and 14,000 in 2 years.  If the tax rate is 50 percent and the cost of capital is 10.74 percent, what is the net present value of the new oven project?