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| Consider the following projects: |

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| --- | --- |
|   | Cash Flows, $ |
| Project | *C*0 | *C*1 | *C*2 | *C*3 | *C*4 | *C*5 |
| A | –1,200       | +1,200       | 0       | 0       | 0       | 0       |
| B | –2,400       | +1,200       | +1,200       | +4,200       | +1,200       | +1,200       |
| C | –3,000       | +1,200       | +1,200       | 0       | +1,200       | +1,200       |
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| **a-1.** | If the opportunity cost of capital is 12%, what is the NPV for each project? **(Negative amounts should be indicated by a minus sign. Do not round intermediate calculations. Round your answers to 2 decimal places.)** |

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| --- | --- |
| Project |    NPV |
| A | $   |
| B | $   |
| C | $   |
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| **b.** | Calculate the payback period for each project. **(Do not round intermediate calculations. Round your answer to 2 decimal places.)** |

|  |  |
| --- | --- |
| Project | Payback Period |
|   A | year(s)   |
|   B | year(s)   |
|   C | year(s)   |
|  |

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| **d.** | Calculate the discounted payback period for each project. **(Enter 0 if the payback period cannot be calculated. Do not round intermediate calculations. Round your answers to 2 decimal places.)** |

|  |  |
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| Project |    Discounted  Payback Period |
| A | year(s)   |
| B | year(s)   |
| C | year(s)   |
|  |

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| You have the chance to participate in a project that produces the following cash flows: |

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| Cash Flows, $ |
| *C*0 | *C*1 | *C*2 |
| +5,000       | +4,000      | –11,000     |
|  |

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| **a.** | The internal rate of return is 13%. If the opportunity cost of capital is 10%, what is the NPV of the project? **(Negative amount should be indicated by a minus sign. Do not round intermediate calculations. Round your answer to 2 decimal places.)** |

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| --- | --- |
|   NPV | $   |

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| Machines A and B are mutually exclusive and are expected to produce the following real cash flows: |

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| Cash Flows ($ thousands) |
| Machine | *C0* | *C1* | *C2* | *C3* |
| A | –109      | +119      | +130      |   |
| B | –129      | +119      | +130      | +142      |
|  |

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| The real opportunity cost of capital is 8%. (Use PV table.) |

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| **a.** | Calculate the NPV of each machine. **(Do not round intermediate calculations.** **Enter your answers in thousand rounded to the nearest whole number.)** |

|  |  |
| --- | --- |
| Machine | NPV |
| A | $   |
| B | $   |
|  |

|  |  |
| --- | --- |
| **b.** | Calculate the equivalent annual cash flow from each machine. **(Do not round intermediate calculations. Round "PV Factor" to 3 decimal places. Enter your answers in thousand rounded to the nearest whole number.)** |

|  |  |
| --- | --- |
| Machine | Cash flow |
| A | $   |
| B | $   |