## ECO B9502

Spring 2006
Homework 5
Due Monday, April 10, 2006

| Year | Benefit | Cost | Salvage Value |
| :--- | :---: | :---: | :---: |
| Beginning of Year 1 | $\$ 0$ | $\$ 100000$ | 0 |
| End of Year 1 | $\$ 70000$ | $\$ 40000$ | 0 |
| End of Year 2 | $\$ 60000$ | $\$ 35000$ | 0 |
| End of Year 3 | $\$ 45000$ | $\$ 33000$ | 0 |
| End of Year 4 | $\$ 50000$ | $\$ 20000$ | 0 |
| End of Year 5 | $\$ 20000$ | $\$ 19000$ | $\$ 3000$ |

Suppose a transportation firm is considering investing in a project with the costs and benefit per period given above.
(1) If the discount rate is $6 \%$, should the firm invest in the project?
(2) Suppose the discount rises to $10 \%$. Should it invest?
(3) Suppose the discount rate is $6 \%$ and the salvage value of the project rises to $\$ 10000$. Is it still worthwhile to invest?

