

Fin 350

Quiz 1

1) Assume that the annual riskless rate of interest is 5%. Calculate the NPV of the following **riskless** investments, and, based on your calculation, decide whether you should take them on:

a) Invest \$5000 today and receive \$15,000 one year from now.[3]

$$\text{NPV} = 15,000/1.05 - 5,000 = 9,285.71$$

Take on the investment

b) Invest \$15000 today and receive \$500 per annum in perpetuity.[3]

$$\text{NPV} = 500/0.05 - 15,000 = -5,000$$

Do not take on the investment

- c) Invest \$5000 today and receive \$100 per annum growing at 2% per annum in perpetuity. (So you receive \$100 in the first year, \$102 in the second year, \$106.12 in the third year, etc.) [3]

$$\text{NPV} = 100/(0.05-0.02) - 5,000 = -1666.67$$

Do not take on the investment

2) *In one sentence*, explain what the NPV of an investment corresponds to. [1]

The extra amount of consumption you could have today if you took on the investment.