Homework 4

Evan Dragich

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4.4

a

$$\begin{aligned} NPV &= -1000 \times exp(-0.06 \times 0) - 600 \times exp(-0.06 \times 2) + 1750 \times exp(-0.06 \times 1) \\ &= -1000 - 600 \times 0.8869204 + 1750 \times 0.9417645 \\ &= -1000 - 532.1522 + 1648.088 \\ &= 115.9358 \\ \\ &= \$115.94 \end{aligned}$$

b

$$\begin{aligned} NPV &= -1000 \times 1 - 600 \times 1.04^{-1} \times 1.055^{-2} + 1750 \times 1.04^{-1} \\ &= -1000 - 600 \times 0.9114109 + 1750 \times 0.9615385 \\ &= -1000 - 546.8465 + 1682.692 \\ &= 135.8455 \\ \\ &= \$135.85 \end{aligned}$$

4.5

4.7

4.9

5.4

5.9

5.13