

**ADDITIONAL PROBLEM FOR CHAPTER 11****11-13**  
Scenario analysis

Worldwide Technologies encounters significant uncertainty in its sales volume and price with its primary product. The firm uses scenario analysis to determine an expected NPV, which it then uses in its capital budget. The base-case, best-case, and worst-case scenarios and probabilities are provided in the following table. What are this product's expected NPV, standard deviation, and coefficient of variation?

SCENARIO	PROBABILITY OF OUTCOME	UNIT SALES VOLUME	SALES PRICE	NPV (IN 000'S)
Worst case	0.30	10,800	\$6,480	-\$10,800
Base case	0.50	18,000	7,560	+23,400
Best case	0.20	23,400	7,920	+50,400