**Cash Carrying Conundrum**

Jane knows when her associates travel they need a certain amount of cash. Her boss wants her to keep withdrawals to a minimum but also knows there is lost interest associated with taking too much money out. In fact, for a quarterly trip on sales calls a salesperson uses around $50,000 in cash. She knows that many times they are not near the firm’s own bank but they need to obtain money. Therefore they incur a setup fee. This setup fee on average is around $2.50 per order. Jane uses a checking plus account to house all the travel money. The account earns 2% per quarter on any money in the account. Help Jane figure out what her optimal amount of cash the salespeople should be carrying, the total cost of they plan, the number of times they will need to withdraw cash, and the cycle time between withdrawals. The salesforce works 80 days a quarter.

**Maximum Money Matters**

On another note, Jane’s boss would like the sales team to have as little cash on them as possible for safety reasons. They have agreed that around $500 cash is a maximum amount they wish to have a salesperson carry. Now Jane must try to negotiate the setup fee with a number of banks to accommodate this. What setup fee must Jane negotiate to have an EOQ at $500? How many times and often would the salespeople have to withdraw cash (i.e., cycle time)?