Case Notes

# Module D: Simulation

# Staying Ahead of the Demand for Ice Cream

## Case Summary

*This case describes a scenario with Millers Ice cream that shows simulation can be applied to improve the ordering system to make it more efficient.*

Case Analysis *This case illustrates how to set up and solve operations problems using Monte Carlo simulation. Demand for ice cream at Millers for the upcoming summer can be estimated using simulation so that a more efficient ordering system can be suggested.*

## Sample Answers to Case Questions

1. Calculate the probability of demand for ice cream across each increment



2. Using random numbers, simulate demand values across the 14 day period.



3. Calculate the average daily simulated demand for ice cream.

Average daily demand = 196.43

4. Use Excel to calculate average daily simulated demand for ice cream.

