FIN 301 Homework Solution Ch20

Chapter 20: Working Capital Management

1. a. The discount is: 1% of $1,000 = $10

   b. The customer gains an extra 40 days of credit.

   c. With the discount, the customer pays $990. Without the discount, the customer pays $1,000. The difference is: $10/$990 = 1.01%

   A rate of 1.01% per 40 days of extra credit is equivalent to an annual rate of:

   $(1.0101)^{365/40} - 1 = 0.0960 = 9.60\%$

4. a. The expected profit for a sale is:

   $[0.95 \times (\$1{,}200 - \$1{,}050)] - (0.05 \times \$1{,}050) = \$90$

   b. The break-even probability of collection is found by solving for p as follows:

   $[p \times (\$1{,}200 - \$1{,}050)] - [(1 - p) \times \$1{,}050] = 0 \Rightarrow p = 1{,}050/1{,}200 = 0.875$