Exercise 5-7

Part 1 – Compute the High/Low Difference

<table>
<thead>
<tr>
<th>Supplies Expense</th>
<th>Guest Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>High level of activity (July)</td>
<td>12,000</td>
</tr>
<tr>
<td>Low level of activity (March)</td>
<td>4,000</td>
</tr>
<tr>
<td>Change</td>
<td>8,000</td>
</tr>
</tbody>
</table>

Part 1 – Compute the Variable and Fixed Cost Elements

Variable Cost Element = 
Change in Expense ÷ Change in Activity
$6,000 ÷ 8,000 guest days = $0.75 per guest day

Fixed Cost Element = 
High level activity expense – variable cost
Supplies expense at high activity level $13,500
Variable cost ($0.75 x 12,000) 9,000
Total fixed cost $4,500

Part 1 – Cost Formula

Form is Y = a + bX
a = Total fixed cost ($4,500)
b = Variable cost per guest day ($0.75)
X = Number of guest days
Y = $4,500 + $0.75X

Part 2:
X = 11,000 guest days
Y = $4,500 + ($0.75 x 11,000) = $12,750