Managerial Accounting
Chapter 3: Cost Behaviour
Answer Sheet

1. Boots Sold = \( \frac{400,000}{400} = 1,000 \) boots.

Contribution format Income Statement for the semiannual ended June 30, 2014

\[
\begin{align*}
\text{Sales} & \quad 400,000 \\
\text{Less:} & \\
\text{Variable Expenses:} & \quad \text{Selling expenses} \ (50 \times 1,000) \\
& \quad 50,000 \quad \text{\$50} \\
& \quad \text{Administrative expenses} \ (2500 \times 50\%) \\
& \quad 12,500 \quad 12.5 \left( \frac{12,500}{1,000} \right) \\
\text{Cost of Goods Sold} & \quad 200,000 \\
\text{Contribution Margin} & \quad 137,500 \\
\text{Less:} & \\
\text{Fixed Expenses:} & \quad \text{Selling expenses} \ (7500 \times 5000) \\
& \quad 25,000 \\
& \quad \text{Administrative expenses} \\
& \quad 12,500 \\
\text{Operating Income} & \quad 100,000
\end{align*}
\]

2. a. High-Low Method

\[
\begin{align*}
\text{High: May} & \quad 23100 \quad 120 \\
\text{Low: Feb} & \quad (13000) \quad (65) \\
\text{Change} & \quad 10100 \quad 55 \\
\end{align*}
\]

Variable cost per job = \( \frac{10100}{55} = \$184.54 \) per job.

Fixed cost (using high)

\[
\begin{align*}
\text{May: Total cost} & \quad 23100 \\
\text{Less: Total Variable} & \quad (22080) \quad (120 \times 184) \\
\text{Fixed cost} & \quad 1020
\end{align*}
\]

Prepared by: Chavanjit Singh
\[ y = a + bx \]
\[ y = 1020 + 184x \]

\[ \text{Total cost} = y = 1020 + 184x \]
\[ x = 110 \]
\[ y = 1020 + 184(110) = 21260 \]

We will not be able to find the correct total cost because the level of activity (250 jobs) appears to be very high for the level of activity. Both fixed and variable cost will have to increase if the level of activity is 250 jobs.