

Marginal Profit Worksheets and Graphs

1. Create sheet1 as a worksheet:
 - a) Enter data as shown in sheet 1 for all cells A17:A27, but not for cells B17 through B27
 - b) In cell B17, enter $=(A17^2)+25*A17-144$ for the profit equation $-x^2+25x-144$
 - c) Highlight cell B17, edit->copy
 - d) Highlight cells B18:B27, paste to get the updated cell formulas in these cells
 - e) File->save as->Marginal profit
 - f) Highlight cells A16:B27 to get ready to create a chart.

2. Create chart1 as a graph:
 - a) highlight the chart wizard
 - b) select the xy (scatter), select scatter with data points connected by lines using the standard types tab
 - c) next->use the data range tab and series in columns
 - d) next->titles tab, chart title->profit vs. price per book, Value (x) axis:-price per book, Value (y) axis->profit
 - e) axes tab, check primary axis: Value (x) axis and Value (y) axis; Gridlines tab, check major gridlines for only the Value (y) axis; Legend tab, uncheck show legend; Data labels tab, none
 - f) next->place chart ' as new sheet chart1, finish
 - g) put the cursor on 'Value (x) axis'', double left click, scale tab, min 8, max 16 for the x axis
 - h) file->save as->marginal profit.

3. Now the marginal profit file has two components, sheet1 and chart1.

4. Click sheet2 on the bottom tab and enter data as shown in sheet2 for all cells except B6:B18 and E7:E17

5. In cell B6 enter the formula shown in sheet2, then copy it and paste it to the cells B7:B18. Likewise, enter the formula shown in sheet2 for cell E7, copy it and paste it to cells E8:E17. The save the file, i.e. file->save as->marginal profit.

6. To create the chart2 graph:
 - a) highlight cells D7:E17
 - b) follow steps as indicated for chart1 and create chart2 with appropriate headings, etc.
 - c) place the chart ' as new sheet chart2, finish
 - d) update the max and min values for the axes with a double click on the appropriate axis and refer to step 2 g) for chart1
 - e) file->save as->marginal profit.

7. Now the marginal profit file has four components. To create sheet3 and chart3 for the actual marginal profit, follow steps 4-6 and use sheet3 and chart3 as the updated names

for the worksheet and the graph. Then, file->save as->marginal profit to save the file with six components.