



To begin, you will need to enter the following formulas in your table (shown below):

1. Enter the formula for variable cost (demand *times* unit cost) in cell **B8** by typing **=B4\*B5** in the cell and clicking the checkmark icon.
2. Enter the formula for total cost (fixed cost *plus* variable cost) in cell **B9** by typing **=B6+B8** in the cell and clicking the checkmark icon.
3. Enter the formula for revenue (demand *times* price) in cell **B7** by typing **=B4\*B3** in the cell and clicking the checkmark icon.
4. Enter the formula for profit (revenue *minus* total cost) in cell **B10** by typing **=B7-B9** in the cell and clicking the checkmark icon.

The screenshot shows an Excel spreadsheet titled "GBA331\_Breakeven\_Using\_Goal\_Seek". The spreadsheet has columns A through J and rows 1 through 12. The data is as follows:

	A	B	C	D	E	F	G	H	I	J
1	Breakeven Analysis Sample Using Goal Seek									
2										
3	Price									
4	Demand									
5	Unit Cost									
6	Fixed Cost									
7	Revenue									
8	Variable Cost									
9	Total Cost									
10	Profit									
11										
12										

Four red arrows point from text instructions to specific cells in the spreadsheet:

- Arrow 1 points to cell B8 with the text: "1. Type **=B4\*B5** in cell B8"
- Arrow 2 points to cell B9 with the text: "2. Type **=B6+B8** in cell B9"
- Arrow 3 points to cell B7 with the text: "3. Type **=B4\*B3** in cell B7"
- Arrow 4 points to cell B10 with the text: "4. Type **=B7-B9** in cell B10"

A red text box on the right side of the spreadsheet says: "Checkmark icon will appear here when you enter formulas." An arrow points from this text box to the checkmark icon in the top-left corner of cell A16.

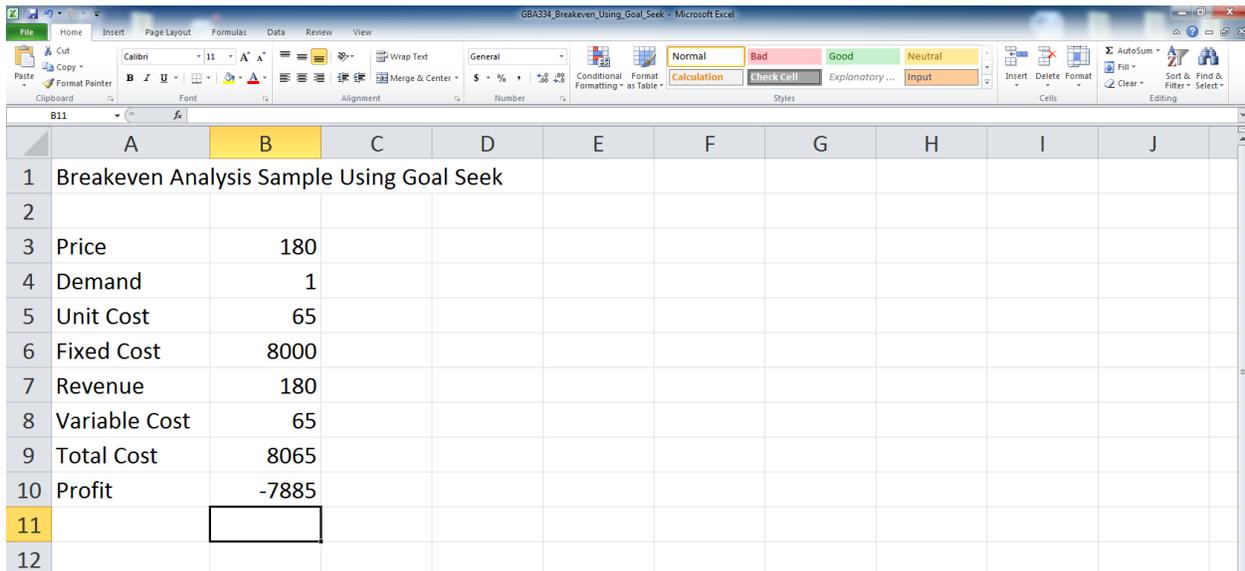
After entering the formulas from the previous page, your table will look like this:

	A	B	C	D	E	F	G	H	I	J
1	Breakeven Analysis Sample Using Goal Seek									
2										
3	Price									
4	Demand									
5	Unit Cost									
6	Fixed Cost									
7	Revenue	0								
8	Variable Cost	0								
9	Total Cost	0								
10	Profit	0								
11										
12										

Now you will use the Goal Seek feature of Excel to solve for the breakeven point. We are going to solve a problem where we have a furniture company that produces tables. The fixed monthly cost of production is \$8,000; the unit cost per table is \$65; the price is going to be \$180 each. You will enter this data into your table as follows:

1. Enter **8,000** in cell **B6**.
2. Enter **65** in cell **B5**.
3. Enter **180** in cell **B3**.
4. Enter **1** in cell **B4** (demand is set to 1 because you are going to run the Goal Seek, and it will determine the demand that causes the furniture company to have the breakeven point).

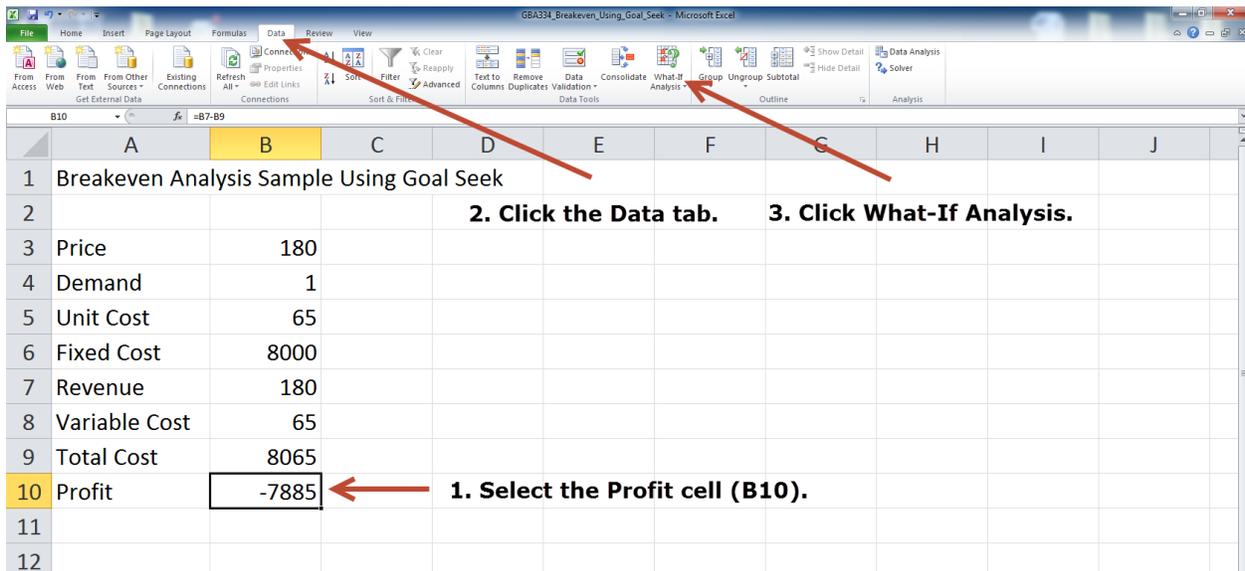
Your table should now look like this:



The screenshot shows an Excel spreadsheet with the following data:

	A	B	C	D	E	F	G	H	I	J
1	Breakeven Analysis Sample Using Goal Seek									
2										
3	Price	180								
4	Demand	1								
5	Unit Cost	65								
6	Fixed Cost	8000								
7	Revenue	180								
8	Variable Cost	65								
9	Total Cost	8065								
10	Profit	-7885								
11										
12										

Next select the profit cell (B10), then click on the **Data** tab and click **What-If Analysis** as shown below:



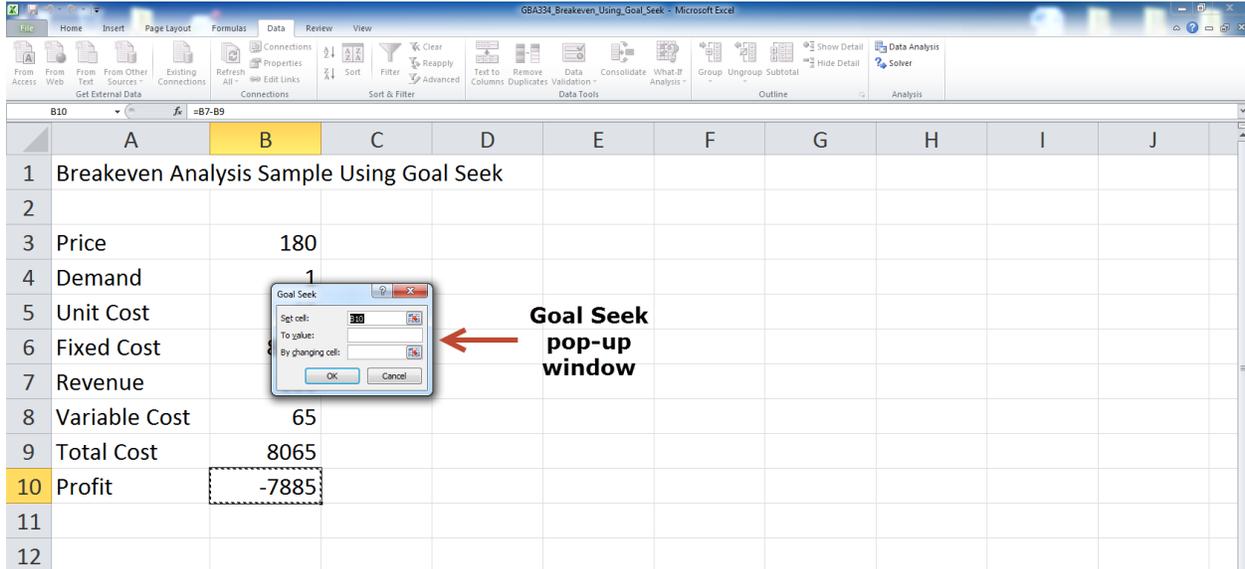
The screenshot shows the same Excel spreadsheet as above, but with the following annotations:

- Red arrow 1: Points to cell B10 (-7885) with the text "1. Select the Profit cell (B10)."
- Red arrow 2: Points to the "Data" tab in the ribbon with the text "2. Click the Data tab."
- Red arrow 3: Points to the "What-If Analysis" dropdown in the ribbon with the text "3. Click What-If Analysis."

	A	B	C	D	E	F	G	H	I	J
1	Breakeven Analysis Sample Using Goal Seek									
2										
3	Price	180								
4	Demand	1								
5	Unit Cost	65								
6	Fixed Cost	8000								
7	Revenue	180								
8	Variable Cost	65								
9	Total Cost	8065								
10	Profit	-7885								
11										
12										

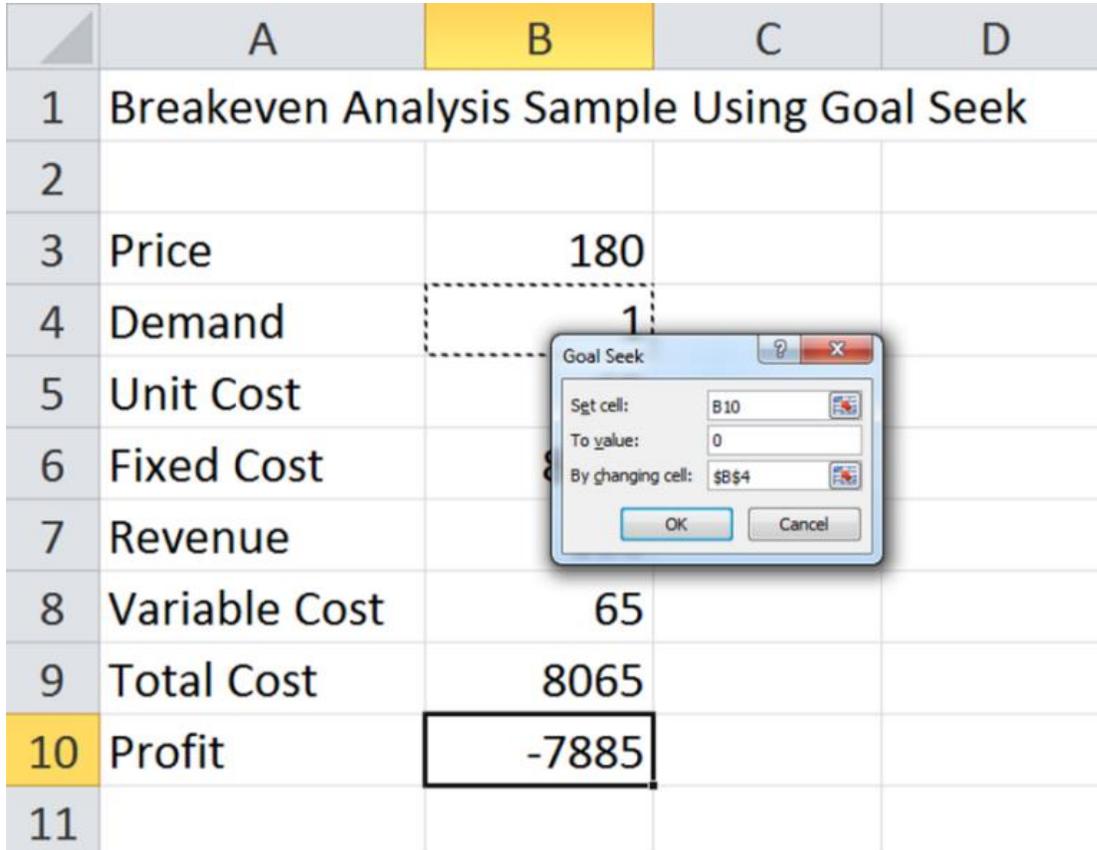
From the What-If Analysis dropdown menu, select **Goal Seek**.

A pop-up window will appear, as shown here:



**Set cell** should already be set to your cell for profits (B10).

Now type **0** next to **To value** and enter **\$B\$4** next to **By changing cell**. Then click **OK** twice.



This shows that at approximately 70 units of demand, we will break even.

	A	B	C	D	E	F	G	H	I	J
1	Breakeven Analysis Sample Using Goal Seek									
2										
3	Price	180								
4	Demand	69.56522								
5	Unit Cost	65								
6	Fixed Cost	8000								
7	Revenue	12521.74								
8	Variable Cost	4521.739								
9	Total Cost	12521.74								
10	Profit	0								
11										
12										

[Click here](#) to download the completed spreadsheet so you can compare it to yours.

In summary, you set up a table for entering price, demand, unit cost, fixed cost, variable cost, total cost, revenue, and profit from the furniture store problem. Then you set up the table area with the formulas for variable cost, total cost, revenue, and profit. After that, you entered the problem data and then used Goal Seek to solve for the breakeven point.

This concludes the tutorial on using Goal Seek to solve for the breakeven point.