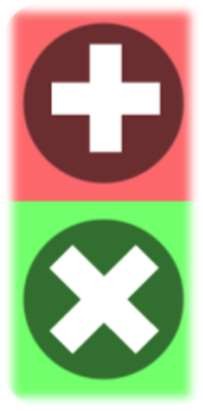
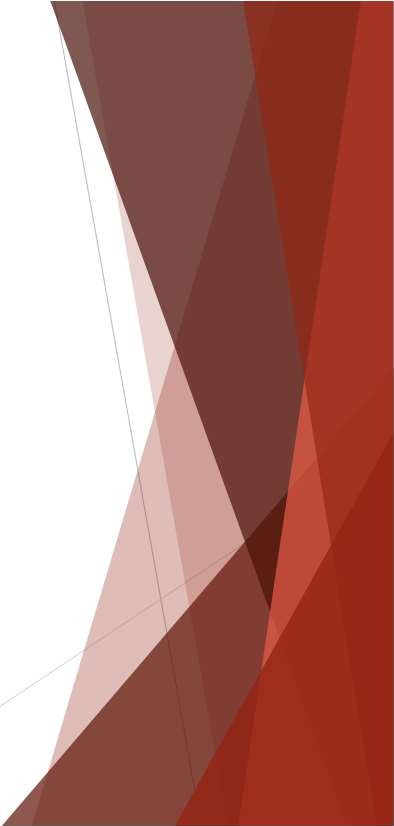


Some Useful Excel Functions for Modeling

SUM and SUMPRODUCT IF and COUNTIF VLOOKUP



Some Useful Excel Functions for Modeling

 **Additional Functions:**

 SUM:

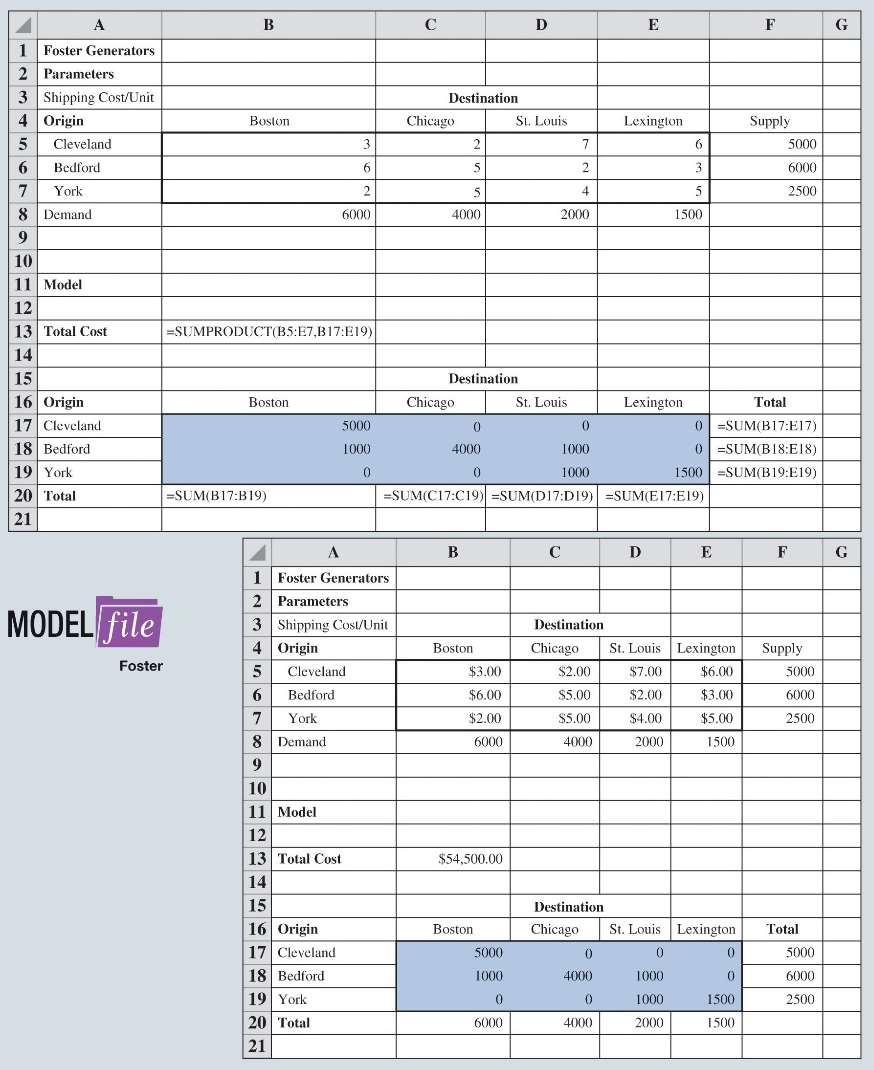
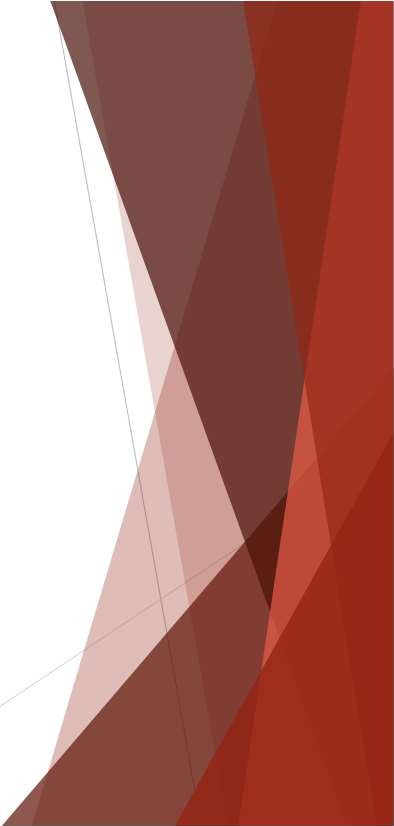
 Function that adds up all of the numbers in a range of cells.

 =SUM(*range)*

 SUMPRODUCT:

 Function that returns the sum of the products of elements in a set of arrays.

 =SUMPRODUCT(*array1, array2)*

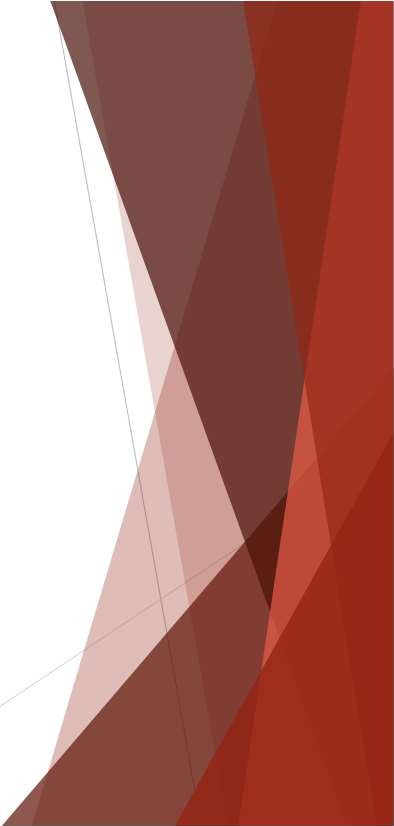


Some Useful Excel Functions for Modeling

Figure 10.16: What-If Model for Foster Generators

 Each element of one array is multiplied by corresponding element of the other array

B5\*B17+C5\*C17 + D5\*D17 + E5\*E17 +B6\*B18 +…+ E7\*E9



Some Useful Excel Functions for Modeling

 **Additional Functions:**

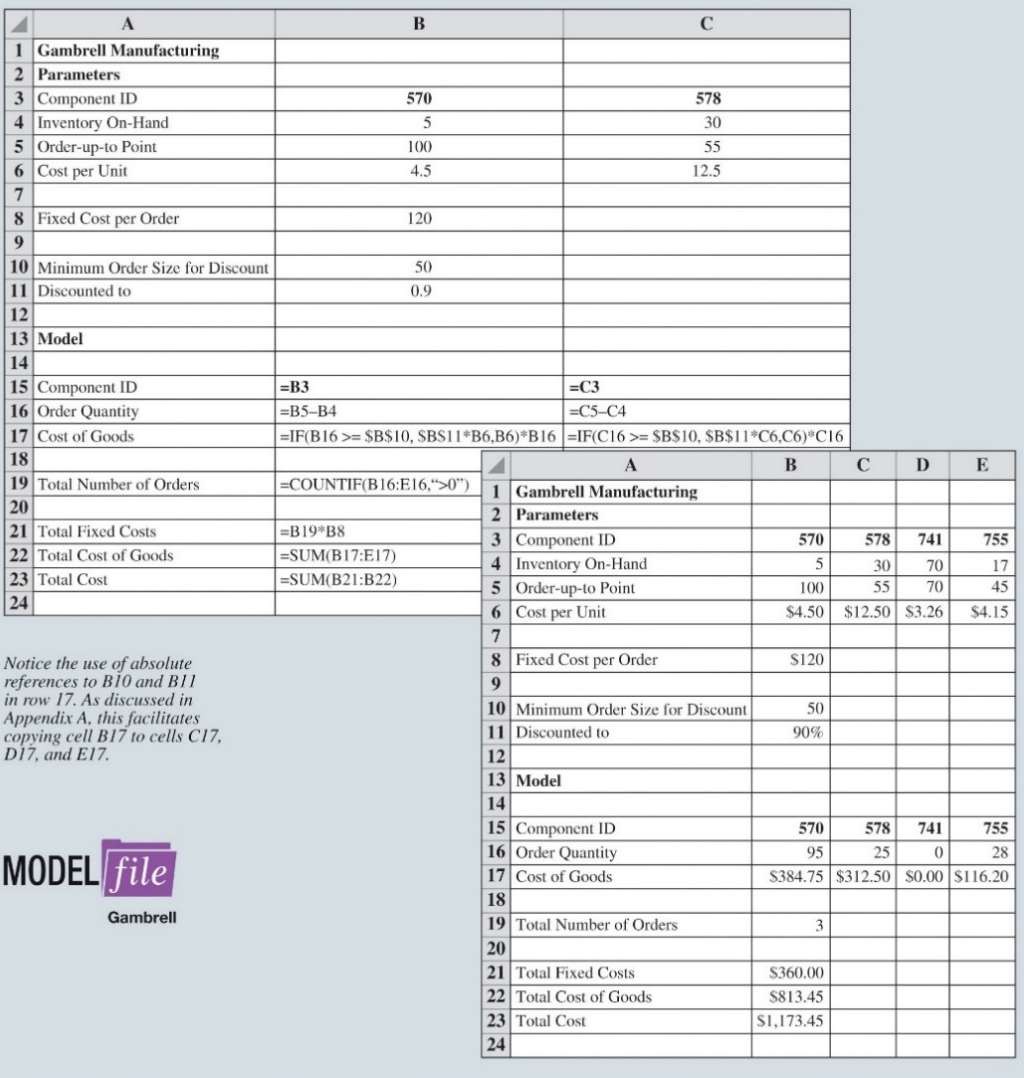
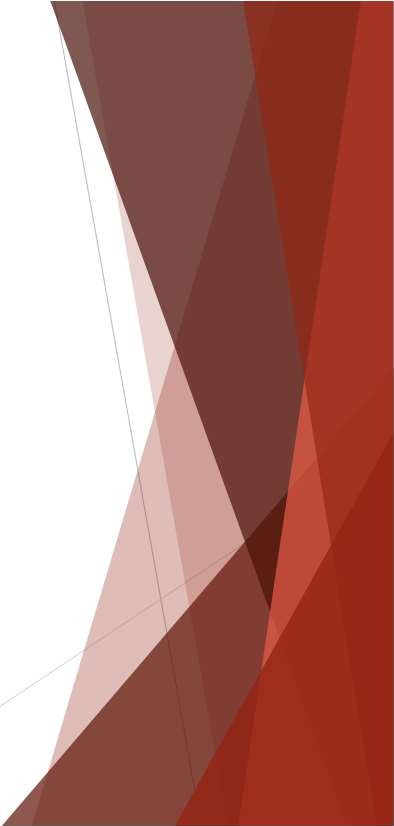
 =IF(condition, result if condition is true, result if condition is false).

 =IF(B16>=$B$10, $B$11\*B6, B6)\*B16

 =COUNTIF(range, condition).

 Counts the number of components having a positive order quantity.

 =COUNTIF(B16:E16, “>0”)



Some Useful Excel Functions for Modeling

Figure 10.17: Gambrell Manufacturing Component Ordering Model

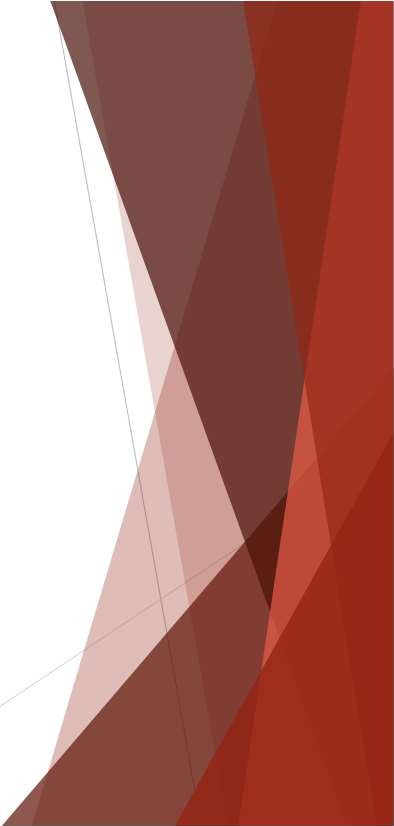
 Illustration:

 Gambrell Manufacturing produces car stereos.

 Gambrell likes to keep its components inventory to a minimum.

 Hence, it uses an inventory policy known as an order-up-to policy.

 Whenever the inventory on hand drops below a certain level, enough units are ordered to return the inventory to that predetermined level.



Some Useful Excel Functions for Modeling

 **VLOOKUP**

 This function allows the user to pull a subset of data from a larger table of data based on some criterion.

 General form =VLOOKUP(value, table, index, range) where,

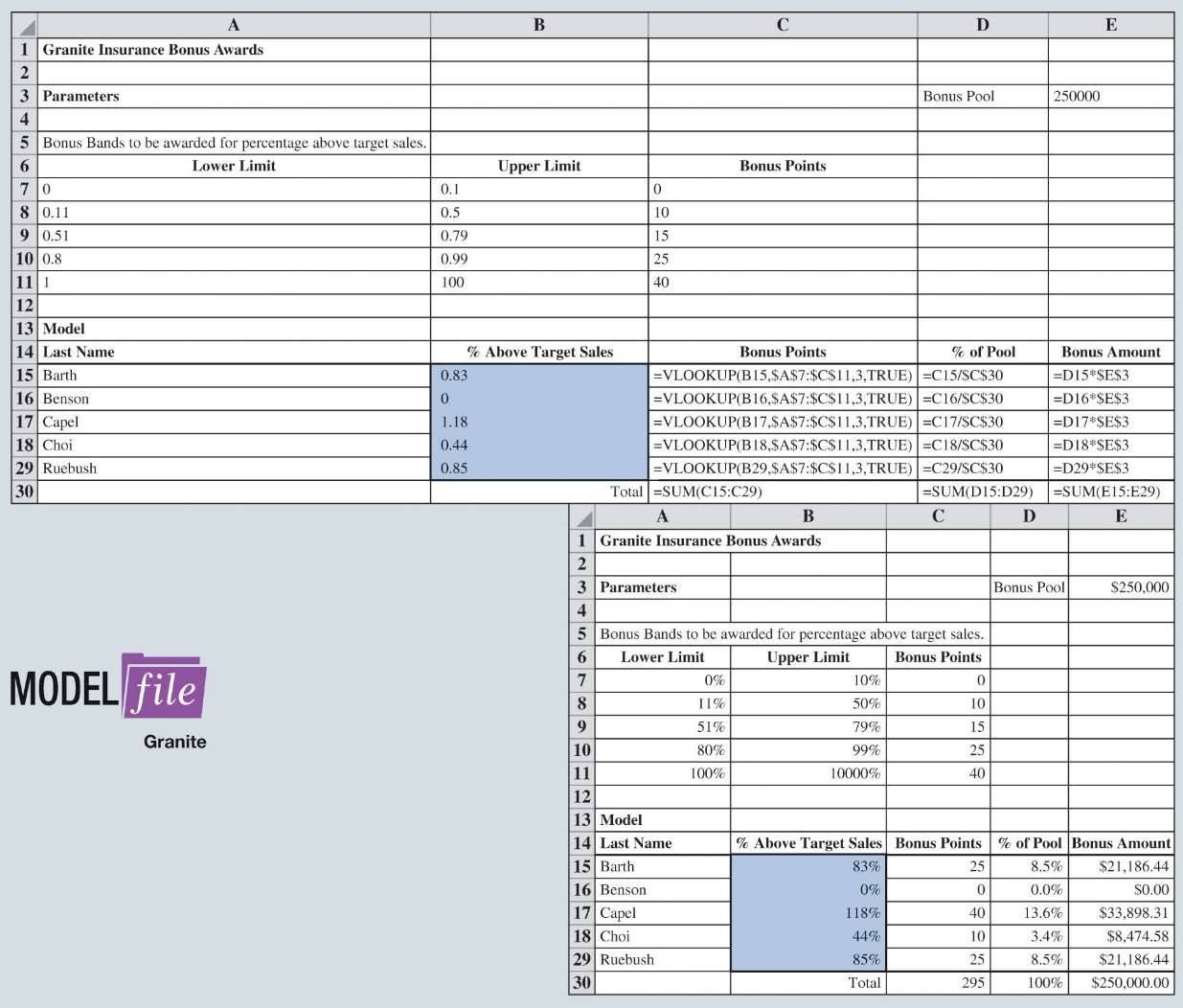
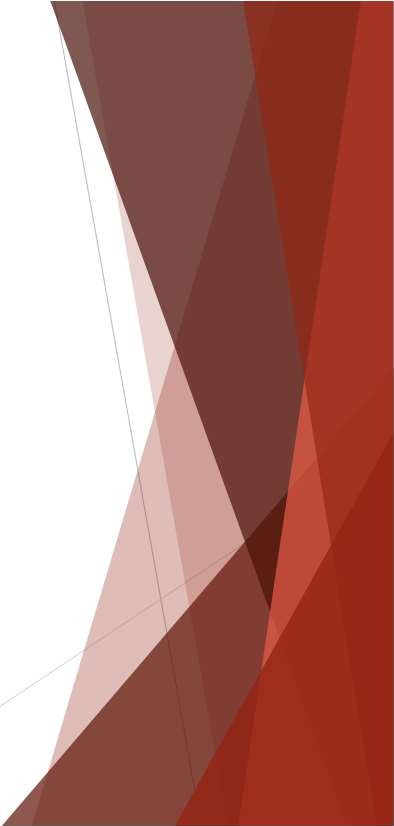
 value = the value to search for in the **FIRST** column of the table.

 table = the cell range containing the table.

 index = the column in the table containing the value to be returned.

 range = TRUE if looking for the first approximate match of value

 FALSE if looking for an exact match of value.



Some Useful Excel Functions for Modeling

Figure 10.18: Granite Insurance Bonus Model