Problem name: Inventory
Input File: InventoryIn.txt

Your favorite uncle Geoff, who owns a popular online electronics store, is about to hold his annual clearance sale. His accountant has advised him to place an item on sale if it is over-stocked *or* it is over-valued. An item is considered over-stocked if it constitutes more than 10% percent of the number of items in the inventory. It is considered over-valued if it represents more than 5% of the dollar value of the inventory. Items that are over-stocked *or* over-valued are marked down by 25%. Items that are over-stocked *and* over-valued are marked down by 50%.

Uncle Geoff has asked you to write a program to determine which items will be included in the annual clearance sale. Since he's your favorite uncle, you've agreed. He only has shelf space for 100 different types of items.

Inputs:
There will be one line of input per inventory item. Each line will contain four fields: the item's unit price, followed by the manufacturer, quantity in stock, and finally the item's name.

Outputs:
One line of output per inventory item formatted and annotated exactly as shown below.

Sample Input:
$75.95 Abit 200 Motherboard
$299.99 Canon 1 Camera
$144.33 Intel 23 Processor
$25.98 Logitech 30 Mouse

Sample Output:
Abit Motherboard 75.95 200 **** Sale item, price: 37.98 ****
Canon Camera 299.99 1
Intel Processor 144.33 23
Logitech Mouse 25.98 30 **** Sale item, price: 19.48 ****