

This is a very good assessment problem for percentage:

(The following actually happened): Recently my wife came home with the receipt displayed below. She informed me that she and her mother went shopping and put their purchases on the same bill. Each person's purchases are marked on the receipt.

- a. Calculate each person's portion of the entire bill.

Wife's is \$42.50 and mother-in-law is \$11.48

- b. Show why reducing the entire bill by 35% is not the same as first taking off 15% and then another 20% off.

Total is \$73.47 without discount.

After 15% off it is \$62.45 and the after 20% it comes to 49.96

If you take off 35% off the total you get \$47.76.

The reason for this is if you take off 15% of the total you then have a smaller number you are taking 20% off of next versus taking the entire 35% off a bigger number.

BEALLS OUTLET BUCKHORN PLAZA

7101 RENE CASH-1 9246 0184 251

124-78450351-MIS ACTIVE	1	3.99
124-79055836-MIS ACTIVE	1	3.99
105-75765949-KISSY TOPS	1	7.99
124-79055836-MIS ACTIVE	1	3.99
124-78410760-MIS ACTIVE	1	3.99
415-78740058-TBL/KITCHEN	1	4.99
400-70871756-HOUSEWARES	1	12.99
400-69252419-BAS KITCHN	1	1.49
ORIG 2.99 50% OFF 1.50-		
400-69252419-BAS KITCHN	1	1.49
ORIG 2.99 50% OFF 1.50-		
400-57612047-BAS KITCHN	1	3.99
00073287207844 UPC		
400-57612047-BAS KITCHN	1	3.99
00073287207844 UPC		
428-63039721-GIFTWRAP	1	.99
00725713019230 UPC		
428-63039760-GIFTWRAP	1	.99
00725713019247 UPC		
428-63039721-GIFTWRAP	1	.99
00725713019230 UPC		
428-63039721-GIFTWRAP	1	.99
00725713019230 UPC		
428-63039721-GIFTWRAP	1	.99
00725713019230 UPC		
402-61119899-CANDY/COKE	1	1.49
00070462098631 UPC		
402-67180317-CANDY/COKE	1	1.09
00034000002405 UPC		
402-67879051-CANDY/COKE	1	1.09
00040000001027 UPC		
005-78737097-JEWELRY	1	4.99
060-78263345-PANTIES	1	2.99
1 @ 2.99 3 OR MORE @ 2.66 EA		
060-78263345-PANTIES	1	2.99
1 @ 2.99 3 OR MORE @ 2.66 EA		
411-78898889-GIFT WRAP	1	.99
00840929014029 UPC		

wife

↑
mother-in-law

Coupon Discount 15% off	11.02-
TRANSACTION DISCOUNT 20%	12.49-
APPROVED	
SUBTOTAL	49.96
8.05% TAX	4.02
TOTAL	53.98

CARD READ BY MSR
ACCOUNT NUMBER *****2057
AUTHORIZATION # 031248
VISA Card 53.98

MESA, AZ 480-807-3063