



Split Tables

Split tables are tables that provide information based on position as well as on row and column – they are like two separate tables joined together. The easiest way to interpret them is to try and imagine dividing the table into separate areas.

Example

Item	Unit Price (£)	Discounts	
		Quantity	Percentage
Shirt	3.25	1-10	0
Skirt	4.70	11-50	4
Trousers	5.30	51-99	7
Jacket	8.50	100+	15
Hat	1.50		

This table is about clothing costings, and also provides information on discount percentages that are available, depending on the quantity that you are purchasing. For example, if you are buying 80 trousers, the cost will be £5.30 per trousers, but there will then be a discount of 7%.

The easiest way to deal with this sort of table is to imagine it as two separate tables, as follows

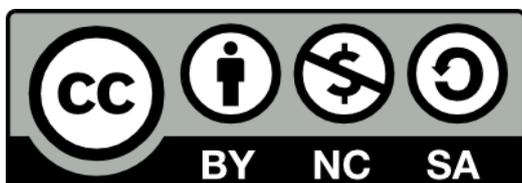
Item	Unit Price (£)	Discounts	
		Quantity	Percentage
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- (i) Mr Choudhry would like to purchase 40 jackets to sell in his store. What is the total cost?

The cost of each jacket is £8.50, and because of the quantity he is purchasing, there is a discount of 4% available – that is, he only needs to pay for 96% of the cost.

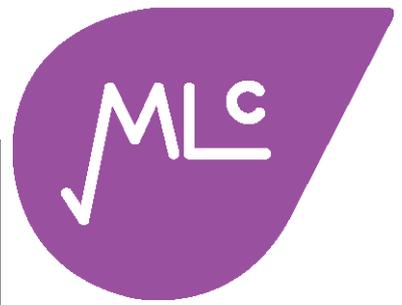
Original cost of 40 jackets $8.50 \times 40 = \text{£}340$
Apply the discount $96\% \times 340 = \text{£}326.40$

Therefore the total cost is £326.40



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Note

Some people may prefer to apply the discount to the original cost of the jacket, and then multiply this new price by 40. Other people may prefer to find the 4% discount and subtract it from the total cost. The important thing is to find a way that you understand, are happy with, and can calculate speedily.

(ii) What quantity of hats can be purchased for £100?

The original price of one hat is £1.25. By dividing 100 by 1.25, we see that 80 hats could be purchased at the original price. However, if you buy 80 hats, a 7% discount applies. Therefore, the cost of the hats would be 93% of £1.25, which is $93\% \times 1.25 = \text{£}1.16$

When we again calculate $100 / 1.16 = 86.2$ we see that 86 hats can be purchased for £100.

(iii) A restaurant owner wants to buy uniforms for her 18 waiting staff and 3 bar staff. Waiting staff need shirt, trousers and hats; and bar staff need shirts, trousers and jackets. What is the total cost?

We first work out the quantity needed of each item

Shirts	$18 + 3 = 21$
Trousers	$18 + 3 = 21$
Hats	18
Jackets	3

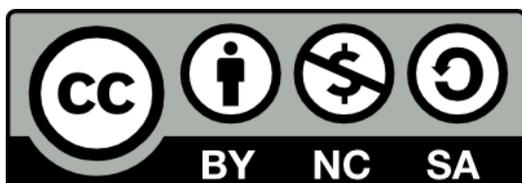
There will therefore be a discount of 4% on the shirts, trousers and hats, but there will be no discount on the jackets.

We calculate the cost, including discount, for each item:

Shirts	$21 \times 3.25 \times 96\% = 65.52$
Trousers	$21 \times 5.30 \times 96\% = 106.85$
Hats	$18 \times 1.25 \times 96\% = 21.60$
Jackets	$3 \times 8.50 = 25.50$

We add the costs together $65.52 + 106.85 + 21.60 + 25.50 = \text{£}219.47$

The total cost is therefore £219.47



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