

Question #6

Presented by : Amara Worrell, Mahmoud Elshikh

Question 6

Suppose that a Winter Coat is listed 40% off, with a sale price of \$180

A- What was the original selling price

B- Suppose you've a coupon which says "Additional 10% off sale items" that you decide to apply towards your coat purchase. What would be the new sale price?

C- If Sales tax is 6.615%, find the amount of tax on the coat purchase after applying the coupon discount, and the total cost including tax.

6 (A)

The coat was listed as 40% off.

To find the original price, we need to find out what 40% of 180 is then Add it to the 180.

To find 40% of 180 we need to change the 40% to a decimal form.

40 divided by 100 = .4

Now we need to multiply this amount by 180. $180 \times .4 = 72$

To find the original price we need to apply the 40% which is 72 to the 180.

$180 + 72 = 252$. The Answer is 252.

6 (B)

We need to subtract 10% off 180.

To do that, we'll have to change 10% into a decimal form.

$$10 \text{ divided by } 100 = .1$$

Now we need to find out what 10% of 180 is.

$$180 \times .1 = 18$$

Now to find out the price after we applied the coupon we've to subtract 18 from 180.

$$180 - 18 = 162$$

6 (C)

To find out the total price, we need to apply the tax which is 6.615%.

As we did in the previous slides we change it into a decimal form.

$$6.615 \text{ divided by } 100 = .06615$$

We multiply that by our price after the discount, and the coupon that we used.

$$162 \times .06615 = 10.72$$

Finally, We add this number to our original cost after the discounts.

$$162 + 10.72 = \$172.72$$

The Coat will cost us 172.72

Learning Objective

This problem performs conversions and calculating involving percents. The reason this learning objective would be connected to this problem because we are converting percents in the question like converting the 40% off in the question to a decimal which is .4 (in order to solve the problem).

This problem also solves problems using percents. The reason why this learning objective would be connected to this problem is because we are using percents in the question.