

Answer on Question#39729 – Math – Other

A store offers 25% off merchandise that is already discounted by 30%. Is this the same as 55% discount off the original price? Explain your answer

Solution:

Let x be original price for merchandise and $x - 0,55x = 0,45x$ be 55% discount .

$0,3x$ – the first discount,

whence $0,7x$ – the second price for merchandise after first discount,

than after second discount 25% we have $0,25 \cdot 0,7x = 0,175x$,

so, the price after second discount is $0,7x - 0,175x = 0,525x$,

that is not the same as 55% discount. It is $x - 0,525x = 0,475x$, so 47,5%

Answer: not the same, it is only 47,5% discount.