



Alg 2 PSAT/SAT practice

Wed, March 25, 2020

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Alma bought a laptop computer at a store that gave a 20 percent discount off its original price. The total amount she paid to the cashier was p dollars, including an 8 percent sales tax on the discounted price. Which of the following represents the original price of the computer in terms of p ?

- A) $0.88p$
- B) $\frac{p}{0.88}$
- C) $(0.8)(1.08)p$
- D) $\frac{p}{(0.8)(1.08)}$



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ANSWERS

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20% discount

* price after discount = $0.8x$

8% sales tax

$100 + 8 = 108\%$ of the price

TOTAL final price = 108% of discount price

$p = (1.08)(0.8x)$

now solve for p (orig price)

$$p = \frac{(1.08)(0.8x)}{(1.08)(0.8)}$$