Conditions

the cost of item is increased by 2 times, after the increasing, the item costs 2 times expensive than the first, what percent is the amount increased in the first time, if the second time the amount is increased by 25%

Solution

Let's item's value is X from the very beginning.

After first time it was increased by A%. The new cost is X*(1+A).

After second time it was increased by 25% (relatively to a previous price, which is equal to X*(1+A)). So the last value is X*(1+A)(1+0,25). And this is 2 times expensive that the first price

$$X(1+A) \cdot 1.25 = 2X$$

$$1 + A = \frac{2}{1.25} = 1.6$$

$$A = 0.6 = 60\%$$

Answer: First time percent was 60%.