Topic: Percent markup

Question: If a bicycle store purchases a bike from the manufacturer for $100, and they mark it up 3%, how much are they selling the bike for?

Answer choices:

A $3

B $110

C $103

D $105

Solution: C

First, we'll find the amount of money by which the store marked up the price of the bike. We'll multiply 3% by the manufacturer's price, which is the price the store paid to the manufacturer.

3% of $\$100$

$\dfrac{3}{100} \cdot \$100$

$\$3$

They marked it up by $\$3$, so we'll add that to the purchase price to find the selling price.

$\$100 + \$3$

$\$103$

Topic: Percent markup

Question: If a furniture store purchases a sofa from the manufacturer, marks it up by 62%, and sells the item for $\$1,296.00$, how much did the store pay the manufacturer for the sofa?

Answer choices:

A $\$800.00$

B $\$900.00$

C $\$1,000.00$

D $\$1,100.00$

Solution: A

If the store paid x for the sofa and marked it up by 62%, then the price they're selling it for is 1.62 times the price they paid for it.

$$1.62x = \$1{,}296.00$$

$$\frac{1.62x}{1.62} = \frac{\$1{,}296.00}{1.62}$$

$$x = \$800.00$$

The store paid the manufacturer $\$800.00$ for the sofa, marked it up by 62% or $\$496.00$, and then sold the item to the customer for $\$1{,}296.00$.

Topic: Percent markup

Question: If we mark up a jacket by 40% and then sell it for $\$63$, how much was the markup?

Answer choices:

A $70

B $40

C $18

D $30

Solution: C

If we say that we purchased the jacket for x dollars, then the price after a 40% markup is applied can be expressed as

$$1.4x$$

This amount has to be equal to the amount we sold it for after the markup, which means

$$1.4x = \$63$$

$$x = \frac{\$63}{1.4}$$

$$x = \$45$$

If we originally paid $\$45$ for the jacket, and then sold it for $\$63$, the amount of the markup was

$$\$63 - \$45$$

$$\$18$$