

DISCOUNTS

Saving Money!

“Never pay full price for anything”

As a consumer, you should only buy things that are on sale. There is always a sale. When things ARE on sale, buy *more* of it. If I don't need it right away, I wait for a sale.

“Discounts” are often a PERCENTAGE.

Example 1:

A pair of neon purple velour trousers regularly cost \$160.

There is a 15% discount.

Determine the new price.

First:

WHAT IS 15% OF \$160?

$$X = \frac{15}{100} \times \$160$$

$$X = 0.15 \times \$160$$

$$X = \$24 \quad \lll \text{THIS IS YOUR DISCOUNT}$$

$$\underline{\$160} - \underline{\$24} = \boxed{\$136} \quad \lll \text{THIS IS YOUR PURCHASE PRICE}$$

Example 2:

A pencil is regularly \$7.80.

After a discount, it is \$6.24.

Determine the percent discount.

Discount value:

$$\mathbf{\$7.80 - \$6.24 = \$1.56}$$

It was discounted \$1.56

WHAT PERCENT	IS	1.56	OUT OF 7.80?
$\frac{\mathbf{X}}{\mathbf{100}}$	=	$\frac{\mathbf{1.56}}{\mathbf{7.80}}$	“percent” means “over 100” “out of” usually means “divide”

Multiply both sides by 100 to get rid of the 100

$\frac{\mathbf{100 \times X}}{\mathbf{100}}$	=	$\frac{\mathbf{1.56 \times 100}}{\mathbf{7.80}}$	
X	=	<table border="1"><tr><td>20%</td></tr></table>	20%
20%			

Continue....

Example 3:

A store is having a BOGO (Buy One Get One Half Off) sale.

A customer buys two products that cost \$40 and \$30

Determine the total cost of the two items.

(Note: You always pay full price for the most expensive of the two)

$$\text{PRICE 1} + \text{PRICE 2} = \text{TOTAL}$$

$$\$40 + \frac{30}{2} = \text{TOTAL}$$

$$\$40 + 15 = \text{TOTAL}$$

$$\boxed{\$55} = \text{TOTAL}$$

*“HALF OFF”
means 50%
discount,
0.50 x price,
...or Price ÷2*

Example 4:

A store offers its members a 20% discount.

A membership costs \$100 per year.

How much would the customer have to spend to make the membership worthwhile?

(Note: You need to SAVE \$200 to break even)

20% OF WHAT IS \$100?

$$\frac{20}{100} \times X = \$100$$

$$\frac{0.20}{0.20} \times X = \frac{\$100}{0.20}$$

$$\boxed{X = \$500}$$

<<< Customer must SPEND \$500 to break even