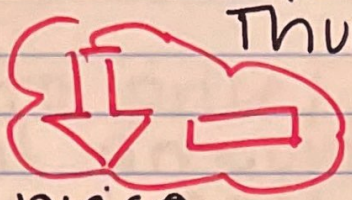
Discounts & Markups

1/07/2021
Thursday



Markdown | Discount
- A decrease in price.
- SUBTRACT from original amount.

Example:
Guitar on sale 45% off.
Original price = 329.99

1) Find the discount amount:

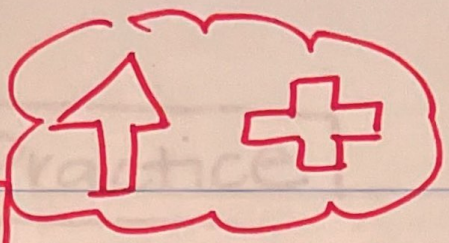
$$\frac{x}{329.99} = \frac{45}{100}$$

$$100x = 45(329.99)$$
$$\frac{100x}{100} = \frac{14849.55}{100}$$
$$x = 148.4955 = \boxed{148.50}$$

2) SUBTRACT discount from original price.

$$\begin{array}{r} 329.99 \\ -148.50 \\ \hline \$181.49 \end{array}$$

* new cost of the guitar.



Markups

- An INCREASE to price/original amount.
- ADD to original cost.

Example:

% Markup = 75%
(sweater) Original cost = $20

1) Find the Markup amount:

$$\frac{x}{20} = \frac{75}{100}$$

$$\frac{100x}{100} = \frac{1500}{100}$$

$$x = 15$$

2) ADD markup amount to original cost.

$$20 + 15$$

* $35 → new cost of sweater.

Guided Practice

1) Socks = $6.95 On sale 20% off.

(a) $\frac{x}{6.95} = \frac{20}{100}$

$\frac{100x}{100} = \frac{139}{100}$

$x = 1.39$

(b) $6.95 - 1.39 = \$5.56$

2) Cookies = $1.00 Markup 15%

(a) $\frac{x}{1.00} = \frac{15}{100}$

$\frac{100x}{100} = \frac{15}{100}$

$x = .15$

(b) $1.00 + .15 = \$1.15$

3) Bagels = $11.50 Save 10%

(a) $\frac{x}{11.50} = \frac{10}{100}$

$\frac{100x}{100} = \frac{115}{100}$

$x = 1.15$

(b) $11.50 - 1.15 = \$10.35$

Independent Practice

5) $\frac{x}{1200} = \frac{12}{100}$

(a) $\frac{100x}{100} = \frac{14400}{100}$

$x = 144$

(b) $1200 - 144$

$\$1056$

6) $\frac{x}{8} = \frac{75}{100}$

(a) $\frac{100x}{100} = \frac{600}{100}$

$x = 6$

(b) $8 + 6$

$\$14$