

6.6 Discounts & Markups

discount - a decrease in the original price of an item (price goes DOWN)

markup - the increase from what the store pays to what they sell it for (price goes UP)

To find Markup/Discount...

Step 1: Find % of

Step 2: Add or Subtract
(markup/discount)

Ex: The original price of the shorts is \$35.
Find the sale price in 2 different ways.



Step 1: % of Step 2: + / -

25% of \$35

$$(0.25)(35)$$

\$8.75 discount

35.00

$$- 8.75$$

\$26.25

$$100\% - 25\% = 75\%$$

75% of \$35

$$(0.75)(35)$$

\$26.25

Ex: What was the original price of the shoes?



$$100\% - 40\% = 60\%$$

$$60\% \text{ of } ? = 33$$

$$\frac{0.60 \times}{0.60} = \frac{33}{0.60}$$

$x = \$55$ was the original price

Ex: A store pays \$70 for a bicycle. The percent of markup is 20%. What is the selling price?



Step 1: % of Step 2: (+) -

20% of \$70

$(0.20)(70)$

\$14

markup

\$70

+ \$14

\$84

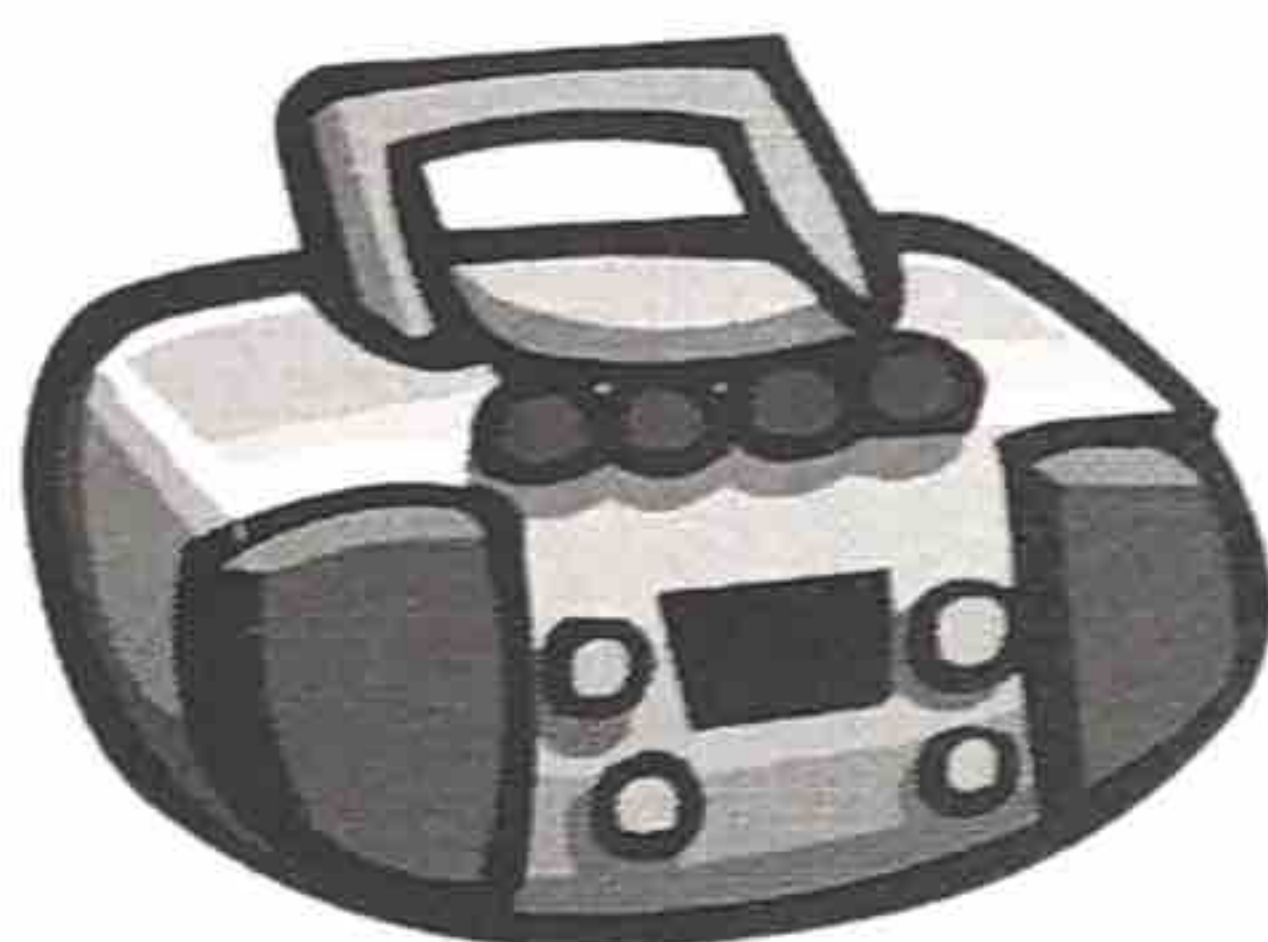
$100\% + 20\% = 120\%$

120% of \$70

$(1.20)(70)$

\$84

Ex: A \$129.50 stereo is discounted 40%. The next month, the sale price is discounted 60%. Is the stereo now free? If not, what is the sale price?



after 40% off:

60% of \$129.50

\$77.70

after another 60% off:

40% of \$77.70

\$31.08

not free!

Ex: You buy a pair of jeans that normally cost \$39.99. They are on sale for 25% off. You also have to pay 6.5% tax. What is the total you owe?

(-)

(+)

New price:

$100\% - 25\% = 75\%$

75% of \$39.99

$(0.75)(39.99)$

\$29.99

After tax:

$100\% + 6.5\% = 106.5\%$

106.5% of \$29.99

$(1.065)(29.99)$

\$31.94