

Percent of a Number

To find percent of a number, follow these steps:

1. Change the percent to a decimal by dividing by 100.

$$\text{eg) } 25\% \div 100 = 0.25$$

2. Multiply the calculated decimal by the amount in question.

of means multiply

$$\text{eg) } 25\% \text{ of } 50$$

$$0.25 \times 50 = \boxed{12.5}, \text{ so } 12.5 \text{ is } 25\% \text{ of } 50.$$

Practice

1. Find 30% of \$120

$$30\% \div 100 = 0.3 \times \$120 = \boxed{\$36} \leftarrow \text{Don't forget units, if present.}$$

2. Find 3.5% of 20 kg

$$3.5\% \div 100 = 0.035 \times 20 \text{ kg} = \boxed{0.7 \text{ kg}}$$

3. Find 15 % of 1190mL

$$15\% \div 100 = 0.15 \times 1190 \text{ mL} = \boxed{178.5 \text{ mL}}$$

Discount and Sale Price

Recall that a discount is an amount of money you get to take off or SUBTRACT from the regular price of the item. A discount is a percent of a number and is calculated using the same steps as above.

E.g. A pair of pants that are \$29.99 are on sale for 20% off. What is the discount?

$$20\% \div 100 = 0.2 \times \$29.99 = \boxed{\$5.998} \leftarrow \text{This is the discount}$$

* If you were only asked to find the discount, you would round this to \$6.00. otherwise, do not round until your final answer *

If you are asked to find the sale price, that is the final price after you have subtracted the calculated discount. Remember that if you are asked to calculate the sale price, DO NOT round any of your values until your final answer.

$$\text{Regular price} - \text{discount} = \text{sale price}$$

$$\$29.99 - \$5.998 = \$23.992 \leftarrow \text{The 2 tells the 9 to stay the same.}$$

$$= \boxed{\$23.99}$$

Practice

Another way of saying
what is the discount?



1. A television that costs \$729.50 is on sale for 40% off. What are the savings?

$$40\% \div 100 = 0.4$$

$$0.4 \times \$729.50 = \$291.80$$

The savings on this
television would be
\$291.80.

2. A gym membership that regularly costs \$99.00 is advertised as being on for 25% off for the New Year. How much will it cost to join the gym after the discount has been applied? (i.e. what is the sale price?)

$$25\% \div 100 = 0.25$$

$$0.25 \times \$99.00 = \boxed{\$24.75} \leftarrow \text{This is the discount}$$

$$\$99.00 - \$24.75 = \boxed{\$74.25} \leftarrow \text{Sale price}$$