

Shoe Sale


For this unit, we recommend the calculator at this link: https://calculator-1.com It has a memory and \% and +/- keys.

Fabulous Footwear on the mall had a sale on Reebok sport shoes.

| Kind of Shoes | Regular Price | Sale Price |
| :--- | :---: | :---: |
| Little boys' Classic Nylon | $\$ 55.00$ | $\$ 45.99$ |
| Girls' Bangles | $\$ 64.00$ | $\$ 54.99$ |
| Women's Freestyle High | $\$ 78.00$ | $\$ 68.99$ |
| Women's Powertrainer | $\$ 87.00$ | $\$ 73.99$ |
| Men's D-Factor Mid | $\$ 95.00$ | $\$ 75.99$ |
| Men's Aurora | $\$ 103.00$ | $\$ 83.99$ |

## THE LESSON

There are two questions:
"How much money do you save on each pair of shoes?"
and
"What percentage of the price do you save?"
(1) Children (and students working in breakout rooms!) should first prepare data sheets. They may work in groups. The data sheet for a group may look like this:

| Kind of Shoes | Regular Price | Sale Price | Savings | Percent savings |
| :--- | :--- | :--- | :--- | :--- |
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(2) They should decide how to compute the answer. The methods should be discussed. Calculators are encouraged!
In face-to-face classes, different ways to compute may be put on the blackboard.

Example (using a calculator with $\mathrm{M}+$ and \% keys)
regular price - sale price $=$ savings is displayed.

[ $\div[\mathrm{MR}][\%]$ percentage savings is displayed
(3) Computations are performed. Tables are filled out. It is important that proper units (dollar sign and percent) be written on the data sheet. Values should be rounded to the nearest cent and to the nearest percent.
The lesson may end in a discussion. Possible topics: sales, savings, good bargains, and so on.

Example of a partially filled out data sheet:

| Kind | Regular | Sale | Savings | Percent savings |
| :--- | :---: | :---: | :---: | :---: |
| Boys' Classic Nylon | $\$ 55.00$ | $\$ 45.99$ | $\$ 9.01$ | $16 \%$ |
| Girls' Bangles | $\$ 64.00$ | $\$ 54.99$ | $\$ 9.01$ | $14 \%$ |
| Women's Freestyle | $\$ 78.00$ | $\$ 68.99$ | $\$ 9.01$ | $12 \%$ |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Can you explain why a savings of $\$ 9.01$ is not the same percentage savings for three shoe prices?

You may fill out the rest of the data sheet!
(a) Now make up some more regular prices and sale prices, and compute the savings and percentage savings.
(b) Next week, Fabulous Footwear is having a $25 \%$ off sale for all its shoes. Can you make a copy of this chart and fill it out?

| Kind of Shoes | Regular Price | Sale Price | Savings | Percent Savings |
| :--- | :--- | :--- | :--- | :--- |
| Little boys' Classic Nylon | $\$ 55.00$ |  |  | $25 \%$ |
| Girls' Bangles | $\$ 64.00$ |  |  | $25 \%$ |
| Women's Freestyle High | $\$ 78.00$ |  |  | $25 \%$ |
| Women's Powertrainer | $\$ 87.00$ |  |  | $25 \%$ |
| Men's D-Factor Mid | $\$ 95.00$ |  |  | $25 \%$ |
| Men's Aurora | $\$ 103.00$ |  |  | $25 \%$ |

Example for Little boys' Classic Nylon (using a calculator with M+ and \% keys)
regular price $-\%$ off = sales price is displayed.
[55.00][M+][-] [25][\%]
$[-][\mathrm{MR}][=][+/-]$ amount of savings is displayed
Make up other percentage savings, and find the sale price and savings!

Example for Little boys' Classic Nylon (using a calculator with M+ and \% keys)
regular price $-\%$ off $=\quad$ sales price is displayed.


$$
[-][\mathrm{MR}][=][+/-] \text { amount of savings is displayed }
$$

Make up other percentage savings, and find the sale price and savings!
If you write about this unit, please be sure to make up some prices and computations of savings and percentage savings.


