

Percentage Fact Sheet

Using DECIMALS:	Using PERCENTAGE PROPORTION:
Find 23% of 98. / What number is 23% of 98 ?	
$0.23 \times 98 =$	$\frac{x}{98} = \frac{23}{100}$
What percentage is 16 of 94?	
Find $\frac{16}{94}$ as a decimal, then write as percentage.	$\frac{16}{94} = \frac{x}{100}$
What percentage is 283 people out of 792?	
Find $\frac{283}{792}$ as a decimal, then write as percentage.	$\frac{283}{792} = \frac{x}{100}$
28 is 45% of what number?	
$0.45x = 28$ or $\frac{28}{x} = 0.45$	$\frac{28}{x} = \frac{45}{100}$
The \$455 was only 12% of the total. What was the total?	
$0.12x = \$455$ or $\frac{\$455}{x} = 0.12$	$\frac{\$455}{x} = \frac{12}{100}$
Percentage of change: Compare the <i>difference</i> to the original - using division. Old price: \$47. New price: \$38. What percentage did the price decrease?	
Find $\frac{\$47 - \$38}{\$47}$ as a decimal and write it as a percentage.	$\frac{\$9}{\$47} = \frac{x}{100}$
Percentage of change: Compare the <i>difference</i> to the original - using division. Before: 45 students. Now: 63 students. What percentage was the increase?	
Find $\frac{18}{45}$ as a decimal and write it as a percentage.	$\frac{18}{45} = \frac{x}{100}$
Percentage of change: Before: \$15.60. Increase: 7%. What is the new price? Since it is an increase, add 7% to 100% to get 107%.	
Convert 107% to a decimal. Then: $1.07 \times \$15.60 =$	$\frac{x}{\$15.60} = \frac{107}{100}$
Percentage of change: At first: 59 kg. Decrease: 12%. What is the new weight? Since it is a decrease, subtract 12% from 100% to get 88%.	
Convert 88% to a decimal. Then: $0.88 \times 59 \text{ kg} =$	$\frac{x}{59 \text{ kg}} = \frac{88}{100}$