

## Exercise Sheet 1: percentage – and interest calculation part 1

Exercise content	Simple formula, percentage calculation
Exercise file	3.2.1_percent1
Result file	3.2.1_percent1_R

Sonja wants to buy a new bicycle for 857 €. Because of a fault with the varnish the salesperson grants a discount of 18%. How much € will Sonja save?

Open the file “percent1” and the worksheet “purchase of bicycle”.

	A	B	C	D
1	<b>Sonjas bicycle</b>			
2				
3	basic value B	percentage p	percentage value P	
4				
5				
6				
7				
8				

Fill in the value for the basic value and the percentage.

Calculate the percentage value with the help of the formula  $P = (B \cdot p) / 100$ .

(Attention: the percentage p will be included to the calculation as a percentage number)

	A	B	C	D
1	<b>Sonjas bicycle</b>			
2				
3	basic value B	percentage p	percentage value P	
4	€857	18%	€ 154,26	
5				
6				
7				
8				

Sven buys a DVD-Player for 100,80 € in sale. That is 70 % of the original price. How much did the DVD-Player cost before?

Activate the worksheet “DVD-Player”.

Enter the percentage and the percentage value.

	A	B	C
1	<b>Svens DVD-Player</b>		
2			
3	<b>percentage value P</b>	<b>percentage p</b>	<b>basic value B</b>
4			
5			
6			

Calculate the basic value B with the help of the formula:  $B = (P \cdot 100) / p$   
 (Attention: The percentage is already marked as percentage. You have to adjust the formula!)

	A	B	C
1	<b>Svens DVD-Player</b>		
2			
3	<b>percentage value P</b>	<b>percentage p</b>	<b>basic value B</b>
4	€ 100,80	70%	€ 144,00
5			
6			

Mrs. Schmidt receives a credit amounting to 2000 €, which she wants to pay back after one year. Therefore she has to pay 115 € for interest. Which interest rate does the bank charge?

Please open the table "interest rate of the bank"

	A	B	C	I
1	<b>Mrs. Schmidts credit</b>			
2				
3	<b>interest I</b>	<b>capital C</b>	<b>rate if interest p</b>	
4				
5				
6				

Fill in the values of I and C and calculate the rate of interest p with the help of the formula  $p = (I \cdot 100) / C$

	A	B	C	I
1	<b>Mrs. Schmidts credit</b>			
2				
3	<b>interest I</b>	<b>capital C</b>	<b>rate of interest p</b>	
4	€ 115,00	€ 2.000,00	5,75%	
5				
6				

Alex has invested money for one year. The bank grant him a rate of interest of 2,75 %. For that he received interest in amount of 99€ after one year. How much money did he invest?

Please open the table "Alex' interests".

	A	B	C	
1	<b>Alex' interest</b>			
2				
3	<b>interest I</b>	<b>percentage p</b>	<b>capital C</b>	
4				
5				
6				

Fill in the values of I and p and calculate the capital C with the aid of the formula  $C = (I \cdot 100) / p$ .

	A	B	C	
1	<b>Alex' interest</b>			
2				
3	<b>interest I</b>	<b>percentage p</b>	<b>capital C</b>	
4	€ 99,00	2,75%	€ 3.600,00	
5				
6				