$\frac{\pi}{\text{Maths Hub}}$

Level 2 Functional Skills Maths Knowledge Organiser

Module 8 – Percentages

Both Papers

Percent means 'out of 100'	Finding a Percentage of an amount with a calculator						
A percentage can always be changed	Find 42% of £325						
to a fraction 'out of 100'	Step 1 Change the percent to a desired		= Standard III				
$37\% = \frac{37}{100} = 37 \div 100 = 0.37$	Change the percent to a dec	= Standard 33 (9					
100	$\frac{42}{} = 42 \div 100 =$	= 0.42			ſ	12	
Express a number as a percentage of	100	0112			U	1.42	
another	Step 2		MC MR M+ M- MS M~				
What is £160 out of £800 as a	Multiply the decimal by the amount		%	CE	С	\otimes	
percentage.	0.42 × 225 - 126 5		1/r	r ²	2/7	<u>.</u>	
$\frac{Small Number}{100}$ \times 100	$0.42 \times 325 = 136.5$						
$-$ Big Number $^{-100}$			7	8	9	×	
160	Step 3 Write the amount in the correct form with the correct units.		4	5	6		
$\frac{100}{000} \times 100 = 20$				2	2		
800							
£160 out of £800 as a percentage = 20%	42% of $\pm 325 = \pm 136$.	50	+/_	0	12	#	
		1					
Percentages without a calculator	Percentage increase and decrease with a calculator						
Find 45% of £325	Increase £425 by 13%	I	Decrea	se £512	2 by 9%	6	
This involves knowledge of	Increase by 13% means to	De	Decrease by 9% means to				
remembering how to divide by find 100% + 13% = 113%		find 100% - 9% = 91%					
10 and 100.			. 2007	0 0,0	02/0		
10% of £325 = £32.50	Find 113% of £425	Find 91% of £512					
$5\% 0J = 2325 = 232.50 \div 2$	$\frac{113}{113} \times 425 = 480.25$	$\frac{91}{100} \times 512 = 465.92$		2			
1 6.2 5	100 120 100120			2			
2 3 $12 \cdot 5 10$	f_{42} f increased by 12% f 512 decreased by 9%			6			
$s_0 5\% of f 325 - f 16.25$	- £435 increased by 13% 25		f 465.92				
303700 J = 210.25	- 1400.25	-	- 100101	-			
45% = 4 lots of 10% and a 5%	Percentage increase and de	crease cai	n be do	one a di	ifferen	t way,	
$450\% \text{ of } 5225 = 4 \times 52250 \pm 51625$	but these methods help you	u with find	ling the	e origin	al amo	ount.	
45% 01 L325 - $4\times$ L32.50 + L10.25							
4 × 32.50 3 2 5	Finding the original amount	<u>ginal amount</u>				×	
$\approx 4 \times 30$ × 4	Original Amount × Multiplier = Final Amount						
= 120							
$= \pounds 130$	A coat is reduced by 32% t	to £136. F	ind the	origin	al cost	of	
	the coat before the sale.	Original				Final	
$\pounds 130 + \pounds 16.25$	Multiplier	Amount × Multiplier = Amou		mount			
1 3 0 0 0		C	Priginal	ΥΩ	-0 _ (F136	
	Decrease by 32%				יאר אר		
+ 16.25	Decrease by 32%	А	mount		00 = 1		
+ 1 6.2 5	Decrease by 32% 100% - 32% = 68%	A	mount = :	£136 ÷	0.68 = 1		
$\begin{array}{ccccccc} + & 1 & 6 & 2 & 5 \\ \hline 1 & 4 & 6 & 2 & 5 \\ \end{array}$	Decrease by 32% 100% - 32% = 68% Multiplier = $\frac{68}{100}$ = 0.68	А	mount = :	£136 ÷	0.68 = 1		