

National 4 Mathematics: Homework 13

§ 1 Revision

1 Calculate, WITHOUT a calculator:

- a) 50% of 18 b) 25% of 32 c) 75% of 20 d) 60% of 40

2 With a calculator, calculate:

- a) 36% of 400 b) 28% of 500 c) 14% of 60 d) 72% of 26

3 Change the following percentages to decimals:

- a) 92% b) 37% c) 14% d) 12.5% e) 3% f) 5.7%

4 Change the following decimals to percentages:

- a) 0.31 b) 0.79 c) 0.04 d) 0.135 e) 0.09 f) 0.01

5 Safe As Houses building society offers interest of 7% on savings. Calculate the interest paid in one year on

- a) £300 b) £1000 c) £75

6 What is the answer to

(l.c.m. of 4 and 10) x (h.c.f. of 15 and 27)

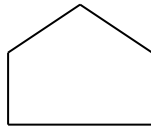
7 Calculate

- (a) 14×23 (b) 21×45
- (c) $459 \div 17$ (d) $912 \div 24$

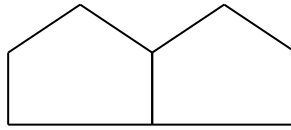
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§ 2 Mixed

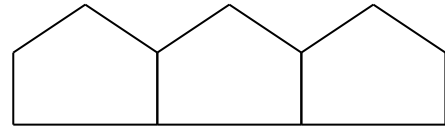
1 Look at the pattern below



Pattern 1



Pattern 2



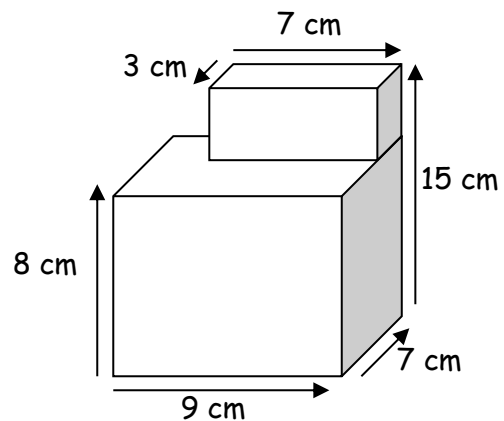
Pattern 3

- (a) Draw pattern four.
- (b) Copy and complete the table below

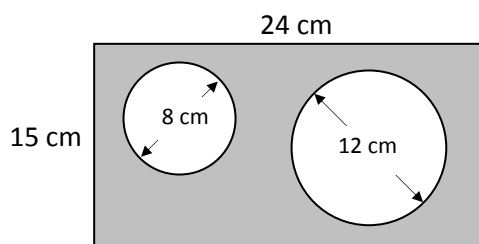
Pattern number	(P)	1	2	3	4	5	-----	16
Number of lines	(L)	5	9	13				

- (c) Write a formula connecting the number of lines, L, and the pattern number, P.
- (d) What pattern number could you draw using 325 lines?

2 Calculate the volume of this 3D shape.



3 Calculate the shaded area in each diagram below.



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