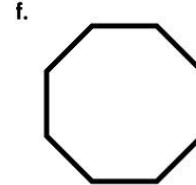
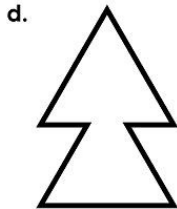
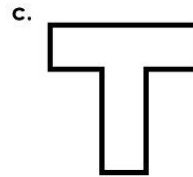
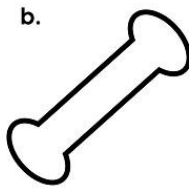
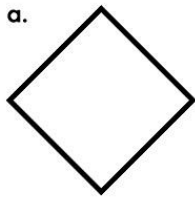


# S1 Homework Test Preparation



1. Copy these shapes and draw in the lines of symmetry

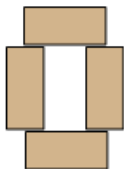


2. Do not use a calculator to work these out.

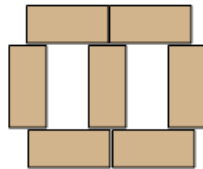
- a)  $3 + 8$       b)  $5 + (-9)$       c)  $1 - 8$       d)  $-2 + 12$   
 e)  $-4 - 8$       f)  $-3 + 7$       g)  $-4 - (-5)$       h)  $-7 + 4$

3. A boy makes a pattern with wooden bricks

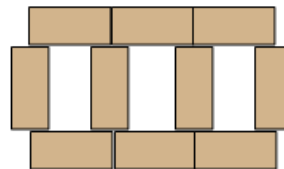
Pattern 1



Pattern 2



Pattern 3



a) Copy and complete the table below.

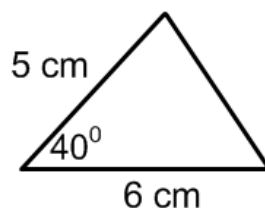
Pattern No (N)	1	2	3	4		30
No of Bricks (B)						

b) Write a formula to calculate the number of bricks needed for each pattern

4. Write down the next two terms in the pattern

- a) 7, 9, 11, 13,  
 b) 24, 22, 20,  
 c) 1, 6, 11, 16  
 d) 1000, 100, 10 (challenging one)

5) Draw the following triangle accurately from this sketch.



6) Complete the tables

n	→	n + 4
7	→	11
12	→	16
20	→	
4	→	
-2	→	

n	→	n x 3
3	→	9
8	→	
2	→	
10	→	
101	→	

n	→	n x 2 + 5
6	→	17
10	→	
1	→	
9	→	
25	→	

7) a) Draw a coordinate diagram and plot these points.  
 A (3, 3)    B (5, 4)    C (7, 3)    D (5, -2)  
 b) What shape is ABCD

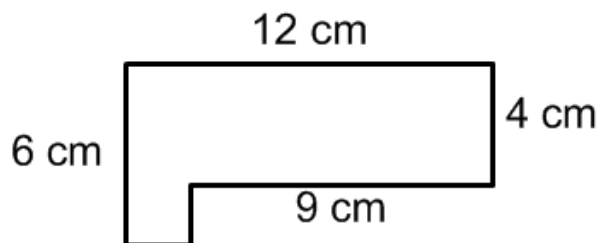
8) What is the median of these sets of numbers

a) 11, 23, 14, 20, 27

b) 4, 6, 8, 10

c) 13 km, 22 km, 40 km, 28 km, 18 km, 35 km

9) Calculate the area and perimeter of this shape



10) A batch of matchboxes are opened to check the number in each box. The results are below. Draw a dot plot to show the results.

38	42	41	42	41	41	39	41
40	41	37	44	41	44	40	41
41	40	42	41	40	42	44	42

Write a comment describing your dot plot and what it shows about the no of matches in the batch.

11) Calculate the answer to each of the following:

a)  $2 + 4 \times 5$     b)  $3 + 7 \times 6$     c)  $11 - 3 \times 2$

d)  $25 + 12 \div 3$     e)  $4 - 6 \div 2$     f)  $(5 + 3) \times 7$

g)  $72 \div (10 - 2)$     h)  $3 + 5 \times 4 - 6$

12) Solve these balance puzzles. Show all your working:

a)  $5x + 7 = 3x + 17$     b)  $6x + 11 = 4x + 27$

c)  $7x + 5 = x + 35$

d)  $8y + 15 = 5y + 42$     e)  $8y + 15 = 4y + 51$

f)  $11y + 37 = y + 97$