

17/03/2021

3L

Add Math Project (30%)

A sequence of figures is made up of unit squares with unit sides. The first three figures in the sequence are shown below.

Figure 1

 $n = 1$

Figure 2

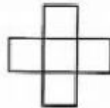
 $n = 2$

Figure 3

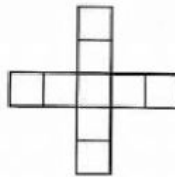
 $n = 3$

Figure 4

- (a) Draw Figure 4 of the sequence in the space provided above. (2 marks)
- (b) Study the pattern of numbers in each row of the table below. Each row relates to one of the figures in the sequence. Some rows have not been included in the table.

Complete the rows numbered (i), (ii), (iii) and (iv).

	Figure	Number of Unit Squares	Perimeter of Figure	
	1	1	4	
	2	5	12	
	3	9	20	
(i)	4			(2 marks)
(ii)		45		(2 marks)
(iii)	30			(2 marks)
(iv)	n			(2 marks)

Total 10 marks