## **Diamond patterns**

## This task is about patterns and their rules.

Loretta made some patterns using green and white diamonds.







Pattern 2



Pattern 3



Pattern 4

a) Complete the table below to show the number of green and white diamonds that each pattern would have.

Pattern Number ( <i>n</i> )	1	2	3	4	5	6	•••	10	25
Number of Green Diamonds, ( <i>b</i> )	3	4							
Number of White Diamonds, ( <i>w</i> )	4	6							

h١	۱i ،	thon	umbor	of groon	diamonds	(h)	to the	nattorn	number (	(n)	١
v,	11)	uieii	ullibei	oi green	ulalliulius	(D)	to the	pattern	Hullibel (	(II)	١.

ii) the number of white diamonds (w) to the pattern number (n).

c) What pattern number would Loretta have painted if the pattern had a total of 86 white diamonds?

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