

# Problems to Ponder

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The below diagram shows the first three of a sequence of figures.

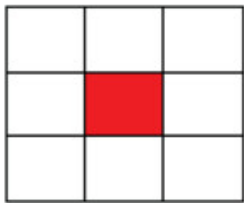


Fig 1

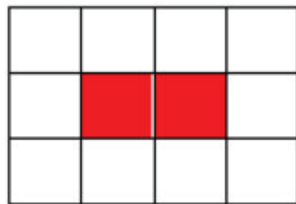


Fig 2

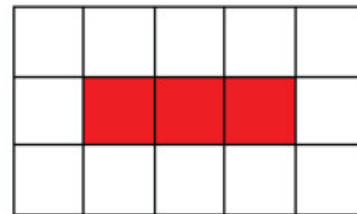


Fig 3

...

A. Draw the 4th figure in the sequence.

B. Copy and complete the table below.

Figure	1	2	3	4	5	...	100	...	n
Number of red squares	1	2				...		...	
Number of white squares	8	10				...		...	

C. How many white squares are there in Figure 205?

D. Which figure will have 236 white squares?

## Solution:

A.



Fig 4

B.

Figure	1	2	3	4	5	...	100	...	n
Number of red squares	1	2	3	4	5	...	100	...	n
Number of white squares	8	10	12	14	16	...	206	...	$2n + 6$

C. There will be 416 white squares in Figure 205.

D. Figure 115 will have 236 white squares.