The Nth Term - set samples - paper 1

Find the correct expression for the nth term of each sequence.

1. A sequence maps positions to terms as shown below:

Position (n):	1	2	3	4	5
Term:	33	30	27	24	21

Which expression represents the nth term?

A 38 - 3n B 37 - 4n C 35 - 2n D 36 - 3n E 36 - 2n

ans_____

2. Which of the following expressions represents the nth term of the sequence below?

10 12 14 16 18

A 3n + 9 B 3n + 7 C 2n - 10 D 2n + 8 E 3n + 8

ans_____

3. Santiago is building a sequence of shapes using bricks. The first pattern uses 5 bricks, the second uses 11 bricks, the third uses 17 bricks, the fourth uses 23 bricks, and so on.
Which expression represents the number of bricks needed for Pattern n?

A 8n - 3 B 4n + 1 C 7n - 2 D 6n - 1 E 6n + 5

ans_____

The Nth Term - set samples - Answers

1. Difference is -3, so use -3n.
   Go backward 1 step from 33
   to find the 0th term:
   33 + 3 = 36

   Result:
   36 - 3n

   Answer: D (36 - 3n)

2. Difference is +2, so use 2n.
   Go backward 1 step from 10
   to find the 0th term:
   10 - 2 = 8

   Result:
   2n + 8

   Answer: D (2n + 8)

3. Difference is +6, so use 6n.
   Go backward 1 step from 5
   to find the 0th term:
   5 - 6 = -1

   Result:
   6n - 1

   Answer: D (6n - 1)