(3) 3 20 78 334 1696 ?

A) 8410 B) 9896 C) 10206 D) 1150

Ans:- The sequence is

$a_n = n\,a_{n-1} + [14 + 4(n-2)]$

$a_2 = 2 \times 3 + [14 + 4 \cdot (2-2)] = 20$

$a_3 = 3 \times 20 + [14 + 4(3-2)] = 60 + (14+4) = 60 + 18 = 78$

$a_4 = 4 \times 78 + [14 + 4(4-2)] = 312 + (14+8) = 312 + 22$

$= 334$

$a_5 = 5 \times 334 + [14 + 4(5-2)] = 1670 + 26 = 1696$

$a_6 = 6 \times 1696 + [14 + 4(6-2)] = 10176 + 30 = 10206$

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