

Q1. (2022)

Q	Answer	Mark	Comments
24	(8th term $\Rightarrow$) 2^8 or 256	M1	oe may be implied
	Common difference of A indicated as 3	M1	may be implied eg $3n \dots$ or $\dots + 3(n-1)$
	$3n + 10 =$ their 256 or (their $256 - 10$) $\div 3$ or (their $256 - 13$) $\div 3$ or 81	M1dep	oe equation eg $13 + 3(n-1) = 2^8$ dep on 2nd M1 their 256 may be any number and may be in index form
	82	A1	
	Additional Guidance		
	$n + 3$ implies 2nd M1		
	Do not award M1 for 256 if it is in a list of powers of 2 unless it is indicated or it is the highest power evaluated		
	Common difference of 3 may be shown on the progression for the 2nd M1		
	10, (13, 16, 19, 22), 25 without common difference of 3 shown does not imply 2nd M1		
	82 from trial and improvement		M3A1
	Embedded answer $3 \times 82 + 10 = 256$		M3A0
	$3n + 10 = 256$ or $3n + 10 = 2^8$ or $3n = 246$		M1M1M1
	$3n - 10 = 256$		M1M1M0
	$3n + 10 = 16$ (2^8 not seen)		M0M1M1
	$3n + 6 = 2^8$		M1M1M0
	$256 - 22 = 234$, $234 \div 3$ (indicating common difference of 3)		M1M1M0
	$3n - 8 = 128$ (2^8 not seen)		M0M1M0