Generating Different Types of Sequence

(a)	(b)	(c)	(d)
Find the first four terms in the sequence with nth term $7n - 4$ $3, 10, 17, 24$	Find the first four terms in the sequence with nth term $15 - 2n^2$ $13, 7, -3, -17$	Find the first four terms in the sequence with nth term 3^{n-1} $1, 3, 9, 27$	Find the first four terms in the sequence with nth term $\frac{1}{2}n(n+3)$ $2, 5, 9, 14$
(e)	**(f)**	**(g)**	**(h)**
Find the 10th and 20th terms of the sequence with nth term $9 - 2n$ -11 and -31	Find the 5th and 7th terms of the sequence with nth term 6×2^n 192 and 768	Find the 3rd and 12th terms of the sequence with nth term $\frac{2n}{n+3}$ 1 and 1.6	Find the 10th and 20th terms of the sequence with nth term $3 + 2n - n^2$ -77 and -357
(i)	**(j)**	**(k)**	**(l)**
Find the sum of the 8th and 15th terms of the sequence with nth term $\frac{5}{2}n + 3$ 63.5	Find the difference between the 2nd and 5th terms of the sequence with nth term $(4n+1)(n-1)$ 75	Find the smallest non-negative number in the sequence with nth term $20 - 7n$ 6	Find the first term in the sequence with nth term $16 \times \left(\frac{1}{2}\right)^n$ that is less than 1. $\frac{1}{2}$
(m)	**(n)**	**(p)**	**(q)**
Find the first three prime numbers generated by the sequence with nth term $2n^2 - 3n + 3$ $2, 5, 23$	Find the sum of all the terms in the sequence $\frac{4^{n-1}}{25}$ that are less than 1. $\frac{21}{25}$	A sequence has nth term $3 \times \sqrt{3}^{n-1}$. Find the value of the 8th term divided by the 4th term. 9	A sequence has nth term $5an - (a+b)n^2$. Find the sum of the first four terms, giving your answer in its simplest form. $20a - 30b$