

The sum of an arithmetic sequence

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Name: _____



a) Find the sum of the first 25 terms of an arithmetic sequence that starts : 6, 10, 14, 18 ...

b) Find the sum of the first 50 terms of an arithmetic sequence that starts : 3, 8, 13, 18 ...

c) Find the sum of the first 30 terms of an arithmetic sequence that starts : 4, 7, 10, 13 ...

d) Find the sum of the first 26 terms of an arithmetic sequence that starts : 100, 96, 92, 88 ...

e) Find the sum of the 40th to the 60th terms of an arithmetic sequence that starts : 3, 5, 7, 9, 11 ...

f) Find the sum of the 60th to the 80th terms of an arithmetic sequence that starts : 2, 8, 14, 20, 26 ...

g) Find the sum of the 25th to the 70th terms of an arithmetic sequence that starts : 99, 96, 93, 90, 87 ...

h) Find the sum of the 44th to the 66th terms of an arithmetic sequence that starts : 10, 13.5, 17, 20.5, 24 ...

For each arithmetic sequence described below, find the first term (**a**) and common difference (**d**) :

i) 7th term is 20. The sum of first 11 terms is 198.

j) 8th term is 35. The sum of first 10 terms is 250.

Exam question

The 5th term of an arithmetic sequence is 30.

The sum of the first 6 terms of the arithmetic sequence is 135.

Find the 20th term of the sequence.

$$S_n = \frac{n}{2} [2a + (n - 1)d]$$

