**Harder Sum of an Arithmetic Series**

(a) An arithmetic series has a first term of $5$ and a common difference of $3$. Find the sum of the series from the 11th term to the 30th term inclusive.

(b) The first five terms of an arithmetic series are:

$$10, 12.5, 15, 17.5, 20$$

Find the sum of this series from the 21st term to the 50th term inclusive.

(c) The fourth term of an arithmetic series is $27$. The tenth term of the same series is $15$. Find the sum of the first $25$ terms of the series.

(d) The 8th term of an arithmetic series is $39$. The sum of the first $20$ terms of the series is $1030$. Find the 18th term of the series.

(e) The sum of the first ten terms of an arithmetic series is $92.5$. The sum of the first $30$ terms of the same series is $427.5$. Find the first three terms of the series.

(f) The 17th term of an arithmetic series is three times the 6th term of the same series. The sum of the first $10$ terms of the series is $200$. Find the sum of the first $20$ terms of the series.

(g) The sum of the first $25$ terms of an arithmetic series is $10$ times the sum of the first $16$ terms of the same series. If the third term of the series is $-14$, find the fifth term of the series.

(h) The first four terms of an arithmetic series are:

$$2k+1, 3k-1, 4k-3, 5k-5$$

Given that the 10th term of the series is $k^{2}+7$, find the two possible values of $k$ and hence the two possible sums of the first $20$ terms of the series.

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