Name: _

PC30S Individual Checkup – Arithmetic Sequences & Series

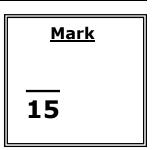
- Write the first 5 terms of each arithmetic sequence:
 a) 7, 11, 15, ?, ?
 - b) $t_1 = -1$ and d = -3
- 2) Find the indicated term for an arithmetic sequence:
 a) t₁ = 5 d = 3 t₁₂ =?

b)
$$t_1 = \frac{2}{3}$$
 $d = -\frac{1}{4} (or - 0.25)$ $t_9 = ?$

3) Find the number of terms in each arithmetic sequence: a) $t_1 = 6$ $t_n = -30$ d = -3

b) $t_1 = -3$ $t_n = 82$ d = 5

c) 23, 20, 17, ..., -100



4) Find t₁ for the following arithmetic sequence:
a) t₆ = 10 t₁₈ = 46

b) $t_5 = 3$ $t_{25} = -57$

- 5) Find t_{102} if $t_7 = 78$ and $t_{18} = 45$
 - Hint Find the first term and the common difference first!

- 6) Find the sum of the arithmetic series:
 - 2 + 5 + 8 + ... + 77

7) Find the sum of the first twenty terms for the series:

23 + 19 + 15 + ...

8) Find S_{20} if $t_1 = 8$ and $t_{20} = 65$

9) Find t_1 if $S_{17} = 106.25$ and $t_{17} = 8.25$.

10) Find d if $S_{15} = 337.5$ and $t_1 = -2$.