

Name: Mwaide Sylvester Chikwaka

Dept: Mechanical

Matric: 14/ENG05/042

$$1) a = -10 \quad T_{15} = 15 \quad L = 41$$

$$S_n = \frac{n}{2} (a + L)$$

$$T_{15} = \frac{11}{2} (10 + 41)$$

$$T_{15} = 11 \frac{1}{2} (31)$$

$$T_{15} = 170.5$$

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

$$a = 180$$

$$d = \frac{175 - 180}{25 - 1} = -5$$

$$d = -5$$

$$n = 25$$

$$S_{25} = \frac{25}{2} (2(180) + (25-1)(-5))$$

$$= \frac{25}{2} (360 + 120)$$

$$= 125 (360 + 120)$$

$$= 3000$$

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