

National 5 Final Revision	Applications
Statistical Skills	Working with Linear Models
Average Allocation	4 Marks

1a.  $C = 5S + 20$

1b. Calories =  $5 \times 28 + 20 = 160$ .

2a.  $2C = 9S + 12$  or  $C = \frac{9}{2}S + 6$

2b. Calories =  $\frac{9}{2} \times 32 + 6 = 150$ .

3a.  $7C = M + 8$

3b. For 2 hours,  $M = 120$ .

So  $7C = 120 + 8 = 128 \Rightarrow C = 18.3$

Approximately 18 chapters can be read in 2 hours.

4a.  $3C = M - 20$

4b. For 3 hours,  $M = 180$ .

So  $3C = 180 - 20 = 160 \Rightarrow C = 53.3$

Approximately 53 chapters can be read in 3 hours.