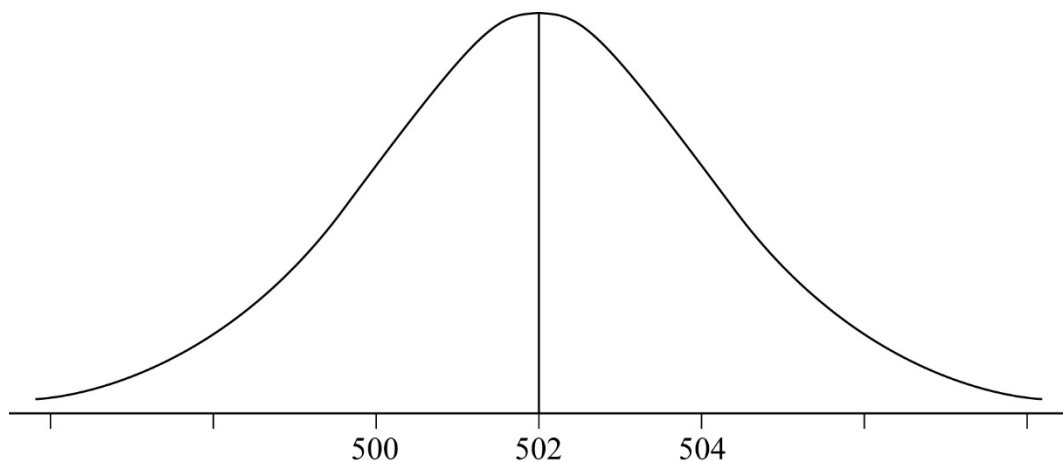


4.3 (a)



(A1)(A1)

Notes: Award **(A1)** for bell shape with mean of 502.
Award **(A1)** for an indication of standard deviation eg 500 and 504.

[2 marks]

(b) (i) 0.921 (0.920968..., 92.0968...%)

(G2)

Note: Award **(M1)** for a diagram showing the correct shaded region.

(ii) $1500 \times 2 \times 0.920968...$

(M1)

= (\$) 2760 (2762.90...)

(A1)(ft)(G2)

Note: Follow through from their answer to part (b)(i).

[4 marks]

(c) $1500 \times 0.16 \times 0.079031...$

(M1)

Notes: Award **(A1)** for $1500 \times 0.16 \times \text{their } (1 - 0.920968...)$.

OR

$(1500 - 1381.45) \times 0.16$

(M1)

Notes: Award **(M1)** for $(1500 - \text{their } 1381.45) \times 0.16$.

= (\$)19.0 (18.9676...)

(A1)(ft)(G2)

[2 marks]

(d) 347 (grams) (346.614...)

(G3)

Notes: Award **(G2)** for an answer that rounds to 346.
Award **(G1)** for 353.385... seen without working (for finding the top 3 %).

[3 marks]

Total [11 marks]