

8 $P(n) = \sum_{k=0}^n k^3 - \sum_{k=0}^{n-1} k^3$ where n is a positive integer.

8 (a) Find $P(3)$ and $P(10)$

[2 marks]

8 (b) Solve the equation $P(n) = 1.25 \times 10^8$

[2 marks]