M2 = 19 days to go!

8 **(a)** Explain the meaning of 3^4

$3^4 = 3 \times 3 \times 3 \times 3$

Answer 81 [1]

(b) Calculate $3^4 \times 5^3$

$3 \times 3 \times 3 \times 3 \times 5 \times 5 \times 5$

Answer 10125 [1]

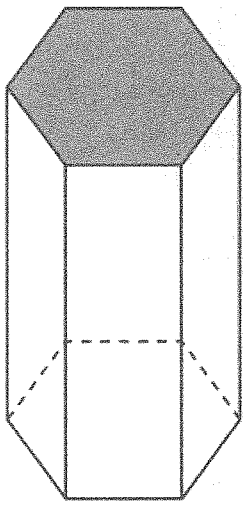
(c) Calculate $4.2^2 + \sqrt{3.61}$

$4.2 \times 4.2 + 1.9$

$17.64 + 1.9$

Answer 19.54 [2]

16 A pillar is in the shape of a hexagonal prism as shown below.



The area of the shaded cross section is $960\,cm^2$
The height of the pillar is 1.2m.
Calculate the volume of the pillar.

Different units.

$1.2m = 120cm$

Vol = Area × Height

Vol = 960 × 120

Vol = 115200

Answer $115200\,cm^3$ [3]

21 The masses of some stones found on a beach are shown in the table.

Find 150th value

Mass (g)	Number of stones
$10 < m \leqslant 20$	33
$20 < m \leqslant 30$	88
$30 < m \leqslant 40$	57
$40 < m \leqslant 50$	52
$50 < m \leqslant 60$	43
$60 < m \leqslant 70$	17
$70 < m \leqslant 80$	10

↓33
↓121 = 33 + 88
↓178 = 33 + 88 + 57

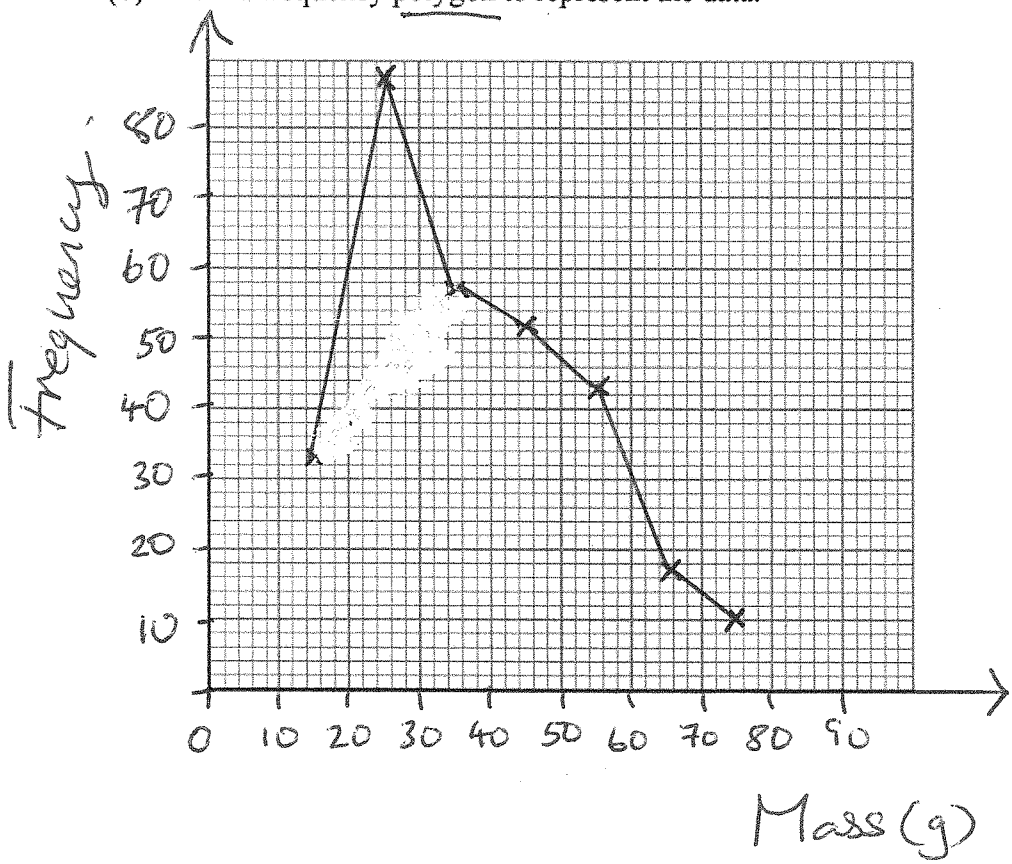
(a) Which interval contains the median mass?

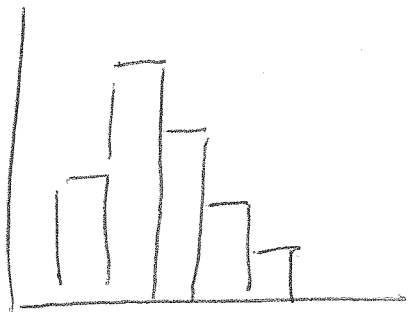
300 values

½ way value

Answer $30 < m \leqslant 40$ [1]

(b) Draw a frequency polygon to represent the data. [4]





Draw bar chart then x in the middle