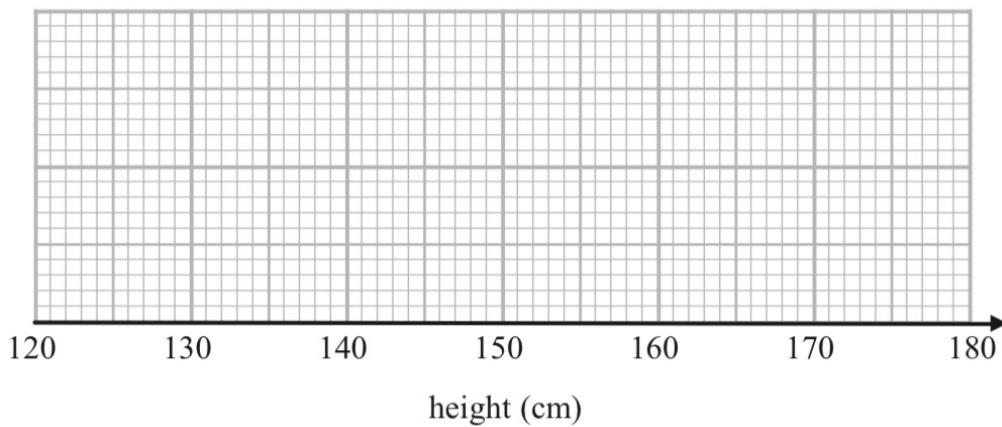


Question 1 (5 Marks)

The table gives some information about the heights of 80 girls.

Least height	133 cm
Greatest height	170 cm
Lower quartile	145 cm
Upper quartile	157 cm
Median	151 cm

- (a) Draw a box plot to represent this information.



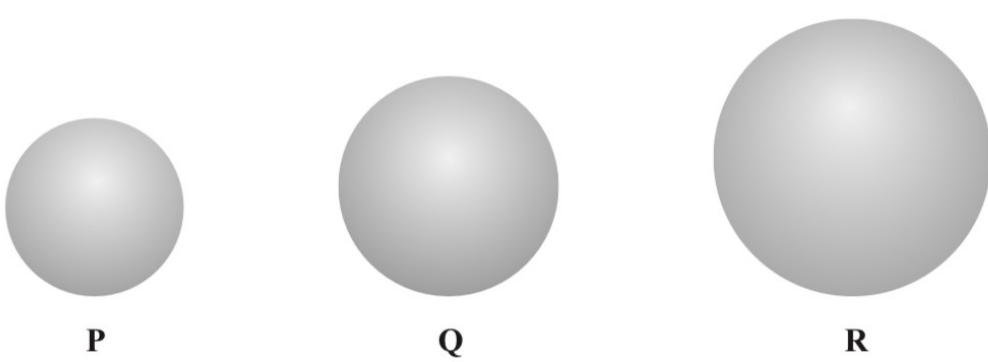
(3)

- (b) Work out an estimate for the number of these girls with a height between 133 cm and 157 cm.

(2)

Question 2 (3 Marks)

Here are three spheres.



The volume of sphere **Q** is 50% more than the volume of sphere **P**.
The volume of sphere **R** is 50% more than the volume of sphere **Q**.

Find the volume of sphere **P** as a fraction of the volume of sphere **R**.

Question 3 (4 Marks)(a) Find the value of $81^{-\frac{1}{2}}$

(2)

(b) Find the value of $\left(\frac{64}{125}\right)^{\frac{2}{3}}$

(2)

Question 4 (3 Marks)

$$x = 0.4\dot{3}\dot{6}$$

Prove algebraically that x can be written as $\frac{24}{55}$