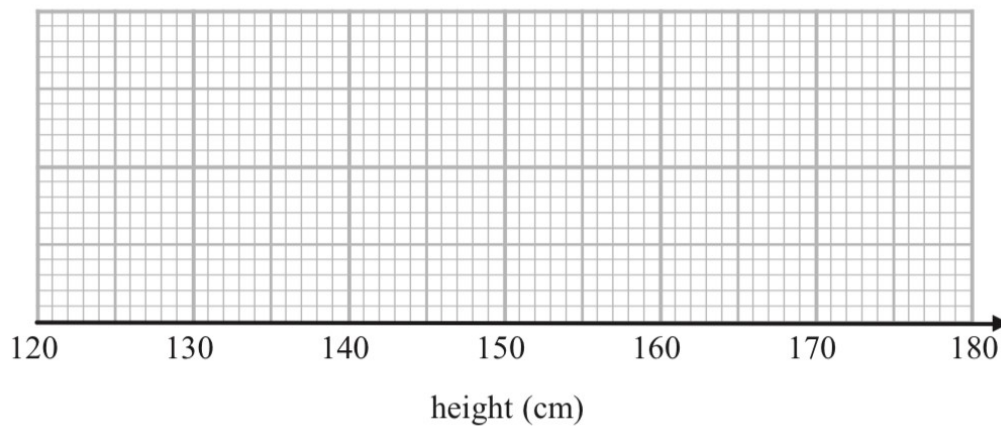


Question 1 (5 Marks)

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.



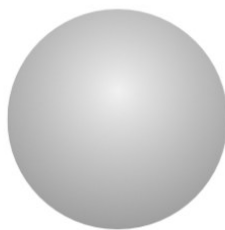
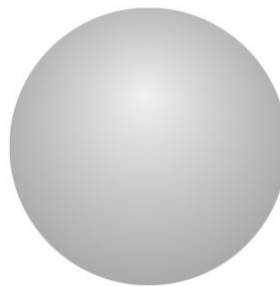
(3)

(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.

**P****Q****R**

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 $\frac{24}{55}$