

27th October



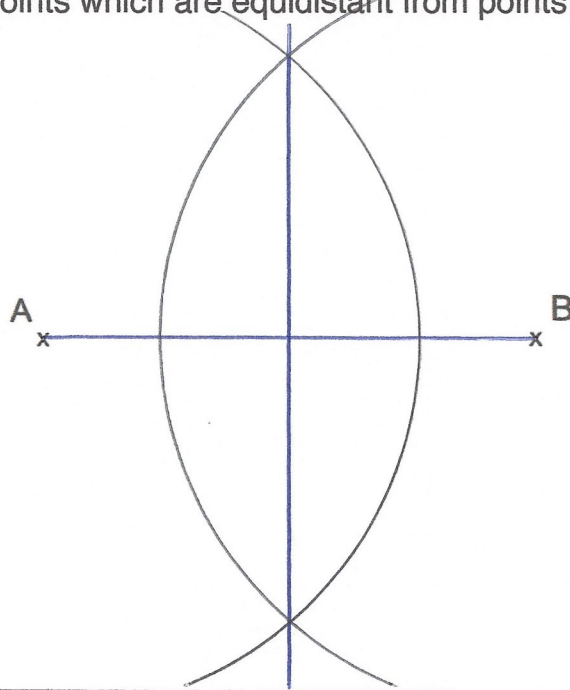
Corbettmaths

Calculate the volume of a cylinder with height 20cm and diameter 8cm.

$$\begin{aligned}
 V &= \pi r^2 h \\
 V &= \pi \times 4^2 \times 20 \\
 &= 320\pi
 \end{aligned}$$

$$= 1005.309 \text{ cm}^3$$

Draw the locus of all points which are equidistant from points A and B.



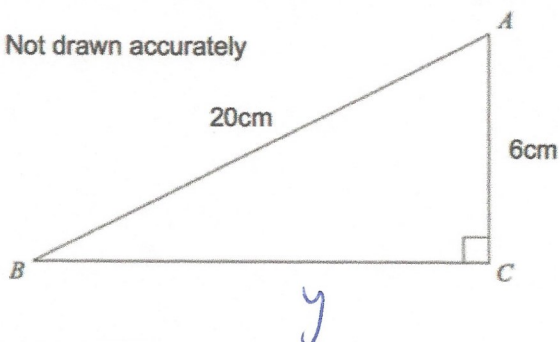
The population of a country is 5.2 million, to the nearest hundred thousand.

$$5,200,000$$

What is the greatest possible number of people that live in the country?

$$5,249,999$$

Not drawn accurately



Find the length of BC

$$\begin{aligned}
 6^2 + y^2 &= 20^2 \\
 36 + y^2 &= 400 \\
 y^2 &= 364 \\
 y &= \sqrt{364} \\
 &= 19.079 \text{ cm}
 \end{aligned}$$