

4th June



Corbettmaths

At a university, the ratio of women to men is 7:5.

75% of the women are under the age of 30.

20% of the men are over the age of 30.

What percentage of all the people at the university are under 30?

$$\left. \begin{aligned} \frac{7}{12} \times \frac{3}{4} &= \frac{7}{16} \\ \frac{5}{12} \times \frac{4}{5} &= \frac{1}{3} \end{aligned} \right\} \frac{7}{16} + \frac{1}{3} = \frac{37}{48}$$

$$\frac{37}{48} \times 100 = \underline{\underline{77.1\%}}$$

The length of a song is 182 seconds. This time, t , has been truncated

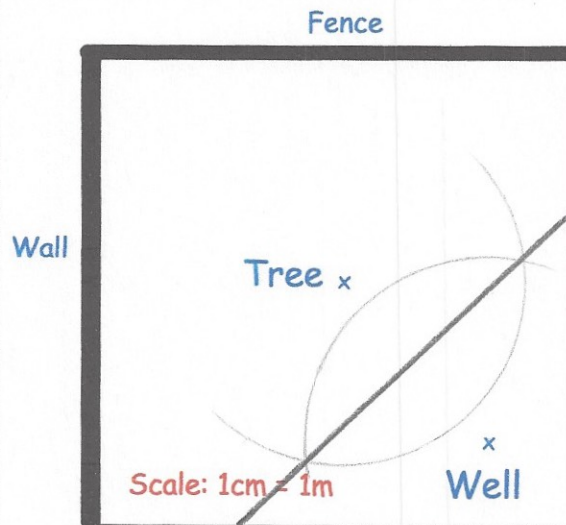
Complete the error interval due to truncation

$$\underline{\underline{182}} \leq t < \underline{\underline{183}}$$

Lindsey is deciding where to place a bench

Show the possible positions of the bench for the rule

The bench is an equal distance (equidistant) from the tree and the well.



Factorise

$$y^2 - x^2$$

$$(y - x)(y + x)$$

Shape A has an area of 144cm^2
Shape B is similar to Shape A with sides 3 times larger.

Work out the area of Shape B

$$\underline{\underline{144 \times 3^2 = 1296\text{cm}^2}}$$