

YEAR 11 MINI-ASSESSMENT 5
HIGHER – CONTEXTUAL QUESTIONS

1. Henry is thinking of having a water meter.
These are the two ways he can pay for the water he uses.

Water Meter

A charge of £28.20 per year

plus

91.22p for every cubic metre of water used

1 cubic metre = 1000 litres

No Water Meter

A charge of £107 per year

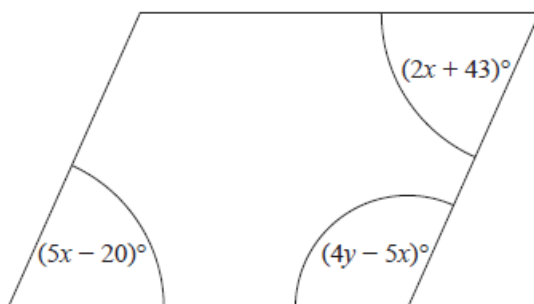
Henry uses an average of 180 litres of water each day.
Should Henry have a water meter? Justify your answer mathematically.

[4 marks]

2. In a company, the ratio of the number of men to the number of women is 3 : 2
40% of the men are under the age of 25
10% of the women are under the age of 25
What percentage of all the people in the company are under the age of 25?

[4 marks]

3. Here is a parallelogram. Find the value of y .



[5 marks]