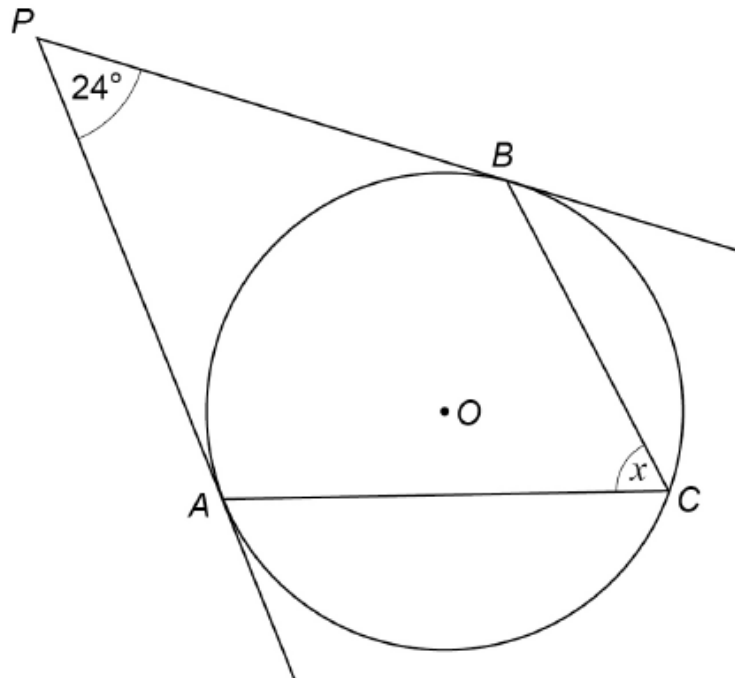


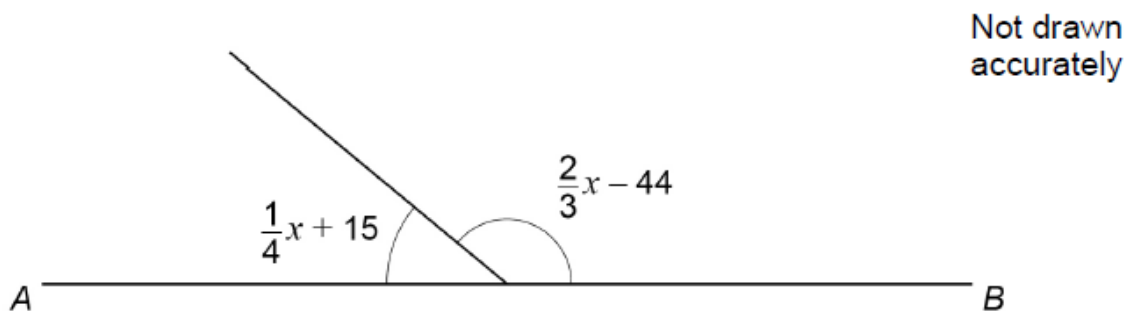
Geometry and measures – GCSE Mathematics

1. No.22

 A , B and C are points on a circle, centre O . AP and BP are tangents to the circle.Not drawn
accuratelyWork out the size of angle x .**[3 marks]**

Answer _____°

Both angles are given in degrees.



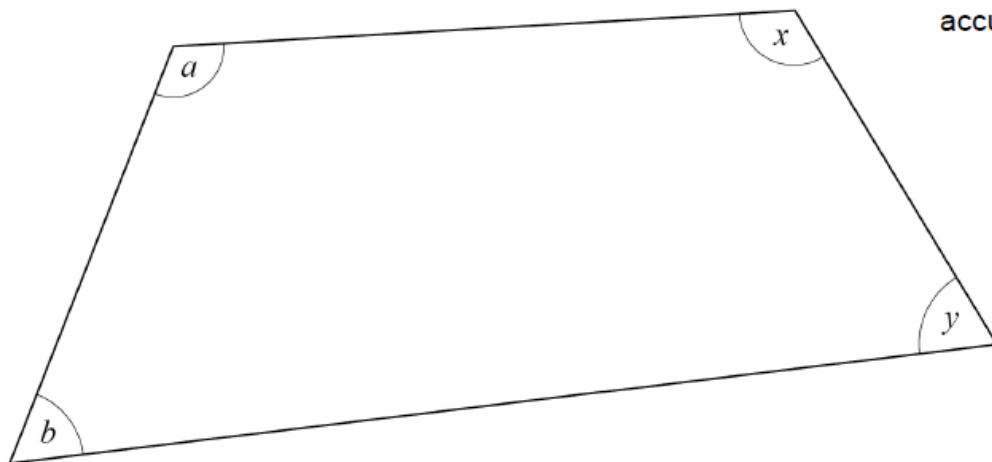
work out the ratio smaller angle : larger angle

[4 marks]

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are approximately 20 lines visible. The paper appears to be a standard notebook or legal pad style.

Answer _____ :

3. No.14

Not drawn
accurately

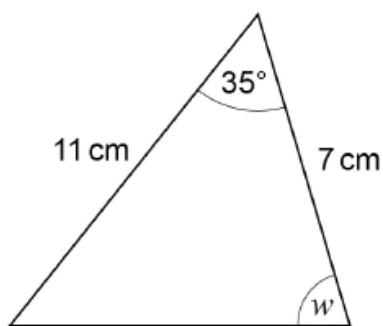
$$b = 45^\circ \quad \text{and} \quad a : b = 7 : 3 \quad \text{and} \quad x : y = 4 : 1$$

Show that $a : y = 5 : 2$

[3 marks]

4. No.18(b)

(b) Here is triangle B.

Not drawn
accurately

Anna thinks that w must be 64° to the nearest degree.

She says,

“This is because triangle B has two sides and one angle the same as triangle A.”

Without further calculation, is she correct?

Tick a box.

Yes

☐

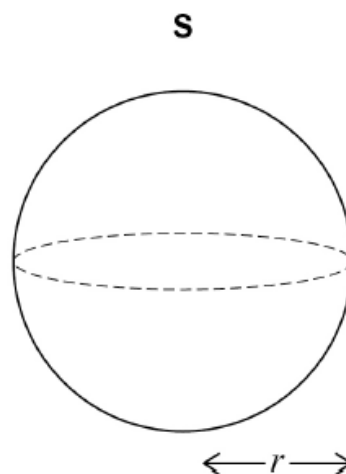
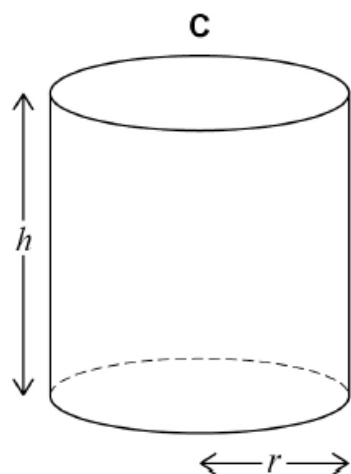
No

☐

Give a reason for your answer.

[1 mark]

5. No.21

A cylinder, C, and a sphere, S, each have radius r C has height h 

$$\text{Volume of a sphere} = \frac{4}{3}\pi r^3$$

where r is the radius

(a) volume of C = volume of S

Work out the ratio $r : h$ You **must** show your working.**[3 marks]**

Answer _____ :

- (b) A different cylinder has radius $3r$ and height $2h$.

How many times bigger is the volume of this cylinder than the volume of C?

[2 marks]

Answer _____