

Name

ANSWERS

Class



MATHS TEACHER HUB

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Surface area

(9 – 1) Topic booklet

Foundation

These questions have been collated from previous years GCSE Mathematics papers.

You must have: Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser.

Total Marks

Instructions

- Use black ink or ball-point pen.
- Fill in the boxes at the top of this page with your name, centre number and candidate number.
- Answer all questions.
- Answer the questions in the spaces provided
 - there may be more space than you need.
- Diagrams are NOT accurately drawn, unless otherwise indicated.
- You must show all your working out.
- If the question is a 1F question you are not allowed to use a calculator.
- If the question is a 2F or a 3F question, you may use a calculator to help you answer.

Information

- The marks for each question are shown in brackets
 - use this as a guide as to how much time to spend on each question.

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

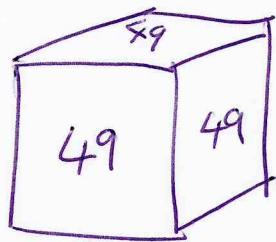
Answer ALL questions
Write your answers in the space provided.
You must write down all the stages in your working.

13 The total surface area of a cube is 294 cm^2 .

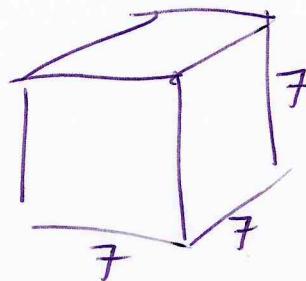
Work out the volume of the cube.

$$6 \overline{)294}^{049}$$

49 cm^2 = each side



$$\sqrt{49} = 7$$



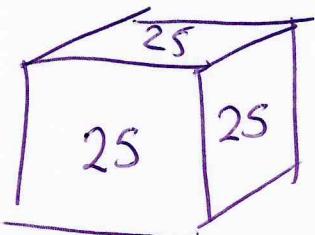
$$343 \text{ cm}^3$$

22 A cube has a total surface area of 150 cm^2

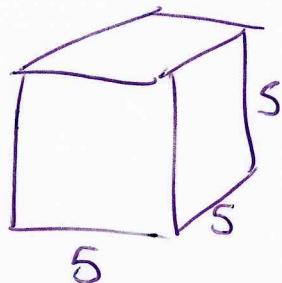
Work out the volume of the cube.

$$6 \sqrt{150} = 025$$

25 cm^2 = each side



$$\sqrt{25} = 5$$



$$125 \text{ cm}^3$$

June 2023 – Paper 1F

(Total for Question 22 is 4 marks)