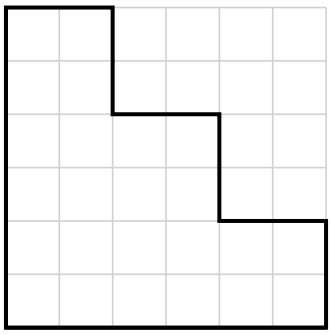
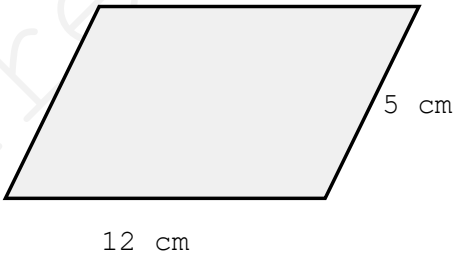
Area, Perimeter & Volume: Medium Practice Paper 8

Q1. Each square on this grid is 1 cm by 1 cm. What is the area of this staircase shape?



A. 20 cm² *B.* 22 cm² *C.* 24 cm² *D.* 28 cm² *E.* 36 cm²

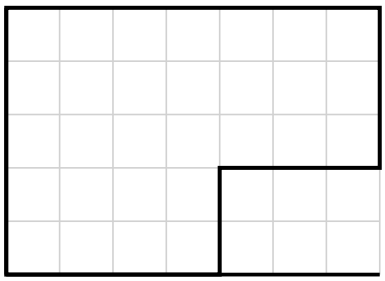
Q2. This parallelogram has a base of 12 cm and a slanting side of 5 cm. Its perpendicular height is 4 cm. What is its area?



A. 24 cm² *B.* 34 cm² *C.* 48 cm² *D.* 60 cm² *E.* 96 cm²

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Q3. Each square on this grid is 1 cm by 1 cm. What is the perimeter of the shape?



A. 20 cm *B.* 22 cm *C.* 24 cm *D.* 26 cm *E.* 30 cm

Q4. A rectangle has a perimeter of 20 cm and both of its sides are a whole number of centimetres. What is the greatest area it can have?

A. 16 cm² *B.* 21 cm² *C.* 24 cm² *D.* 25 cm² *E.* 100 cm²

Q5. A cuboid measuring 6 cm by 5 cm by 4 cm is built out of 1 cm cubes. How many cubes are in the bottom layer?

A. 20 *B.* 24 *C.* 30 *D.* 60 *E.* 120

Q6. A cube has a total surface area of 54 cm². How long is each edge?

A. 2 cm *B.* 3 cm *C.* 4 cm *D.* 6 cm *E.* 9 cm

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Q7. The table shows three packs of paving slabs. Which pack works out cheapest for one slab?

Pack	Slabs	Price
A	10	£25
B	15	£36
C	20	£50

A. Pack A

B. Pack B

C. Pack C

D. Packs A and C are equal cheapest

E. All three are the same

Q8. A cuboid measures 4 cm by 3 cm by 2 cm. The 2 cm height is doubled but the other two measurements stay the same. What happens to its volume?

A. It stays the same

B. It doubles

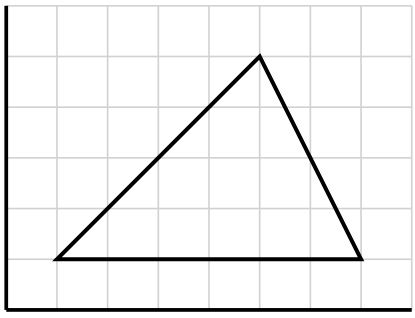
C. It is 3 times bigger

D. It is 4 times bigger

E. It is 8 times bigger

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Q9. Each square on this grid is 1 cm by 1 cm. What is the area of this triangle?



A. 10 cm² *B.* 12 cm² *C.* 15 cm² *D.* 20 cm² *E.* 24 cm²

Q10. Floor tiles cost £18 per square metre. How much does it cost to tile a floor measuring 3.5 m by 2 m?

A. £108 *B.* £115 *C.* £126 *D.* £133 *E.* £140

Q11. A cuboid measures 6 cm by 4 cm by 3 cm. A cube of side 2 cm is cut out of it and thrown away. What volume is left?

A. 56 cm³ *B.* 60 cm³ *C.* 64 cm³ *D.* 66 cm³ *E.* 70 cm³

Q12. There are 10,000 cm² in 1 m². How many square centimetres are there in half a square metre?

A. 5,000 cm²

B. 10,000 cm²

C. 20,000 cm²

D. 50,000 cm²

E. 100,000 cm²

Q13. A path 6 m long and 1 m wide is paved with square slabs of side 50 cm. How many slabs are needed?

A. 12 *B.* 18 *C.* 24 *D.* 30 *E.* 36

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Q14. Which of these shapes has the greatest perimeter?

A. A regular pentagon of side 8 cm

B. A square of side 9 cm

C. A rectangle 12 cm by 5 cm

D. An equilateral triangle of side 13 cm

E. A regular hexagon of side 6 cm

Q15. A square has an area of 36 cm^2. Four of these squares are put together to make one larger square. What is the perimeter of the larger square?

A. 24 cm *B.* 30 cm *C.* 36 cm *D.* 42 cm *E.* 48 cm

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