ENGLAND GCSE MATHS OCR FOUNDATION · UNIT 9 · 25 QUESTIONS

Geometry, Angles, Shapes, Constructions and Similarity — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **A kite has angles 90, 90, 100 and one more. The fourth angle is**

- A 80
- B 260
- C 100
- D 90

Understand It with Pulse | Flag a mistake

2 **A set square is a right-angled triangle with angles 90 degrees, 30 degrees and one more. The third angle is**

- A 30
- B 120
- C 70
- D 60

Understand It with Pulse | Flag a mistake

3 **A castle is 8 m tall. Its model is 20 cm tall. The scale factor from the model to the real castle is**

- A 80
- B 50
- C 40
- D 30

Understand It with Pulse | Flag a mistake

4 **The sail of a sailing ship is a right-angled triangle with sides 9 m, 12 m and 15 m. A similar sail has a shortest side of 18 m. Its longest side is**

- A 30
- B 45
- C 12
- D 24

Understand It with Pulse | Flag a mistake

5 **A Ferris wheel has 24 equally spaced gondolas. The angle between neighbouring gondolas is**

- A 15
- B 10
- C 20
- D 24

Understand It with Pulse | Flag a mistake

6 **A ladder leans against a wall, making an angle of 80 degrees with the ground. The angle between the ladder and the wall is**

- A 80
- B 100
- C 10
- D 20

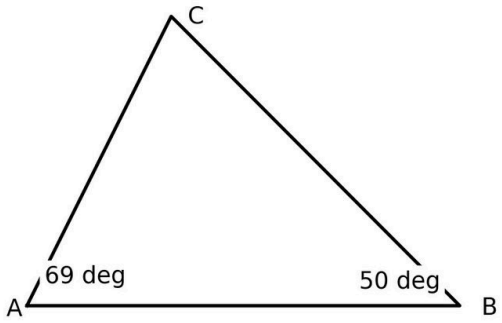
Understand It with Pulse | Flag a mistake

7 **Two parallel lines are cut by a transversal. One angle is 75°. Its alternate angle is**

- A 115°
- B 285°
- C 105°
- D 75°

Understand It with Pulse | Flag a mistake

8 **A triangle has two angles of 69° and 50°. The third angle is**



- **A** 111°
- **B** 119°
- **C** 76°
- **D** 61°

Understand It with Pulse | Flag a mistake

9 **Two angles sit on a straight line. One angle is 48°. The other angle is**

- A 132°
- B 312°
- C 48°
- D 142°

Understand It with Pulse | Flag a mistake

10 **A point is translated by the vector binom-3-2. The point moves**

- A 2 up and 3 right
- B 3 left and 2 up
- C 3 left and 2 down
- D 3 right and 2 down

Understand It with Pulse | Flag a mistake

11 **Two triangles are congruent if they match by**

A side, angle, side

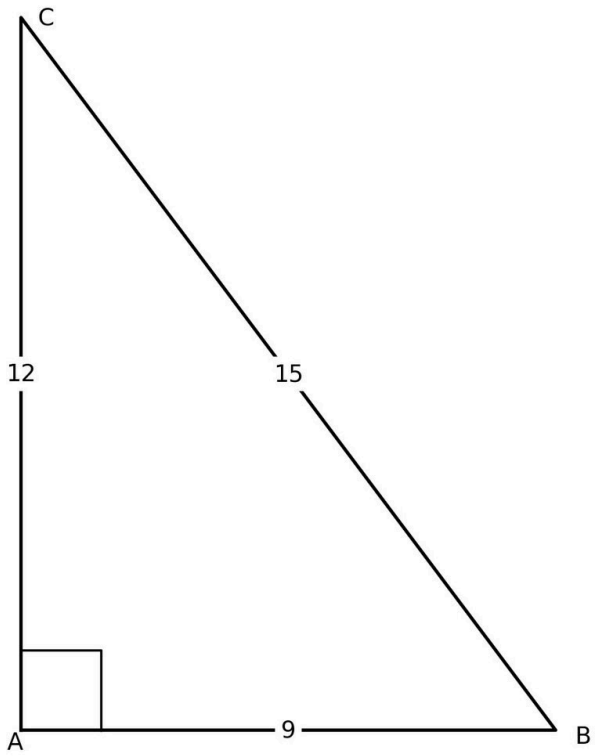
B side, side, side, side

C angle, angle, angle

D side, side, angle

Understand It with Pulse | Flag a mistake

12 **The diagram shows a right-angled triangle with sides 9 cm, 12 cm and 15 cm. A similar triangle has a shortest side of 18 cm. Its longest side is**



A 17 cm

B 45 cm

C 15 cm

D 30 cm

Understand It with Pulse | Flag a mistake

13 **A shape with area 12 cm² is enlarged by scale factor 4. The area of the enlarged shape is**

- A 16 cm²
- B 192 cm²
- C 768 cm²
- D 48 cm²

Understand It with Pulse | Flag a mistake

14 **Each exterior angle of a regular polygon with 9 sides is**

- A 140°
- B 36°
- C 80°
- D 40°

Understand It with Pulse | Flag a mistake

15 **Two straight lines cross. One of the angles formed is 106°. The angle vertically opposite it is**

A 74°

B 106°

C 90°

D 254°

Understand It with Pulse | Flag a mistake

16 **Three angles meet at a point. Two of them are 133° and 59°. The third angle is**

A 192°

B 188°

C 168°

D 47°

Understand It with Pulse | Flag a mistake

17 **The interior angle of a triangle is 50°. The exterior angle at the same vertex is**

A 310°

B 150°

C 130°

D 50°

Understand It with Pulse | Flag a mistake

18 **The sum of the interior angles of a polygon with 8 sides is**

A 900°

B 1440°

C 1260°

D 1080°

Understand It with Pulse | Flag a mistake

19 **Two parallel lines are cut by a transversal. One angle is 70°. Its corresponding angle is**

A 90°

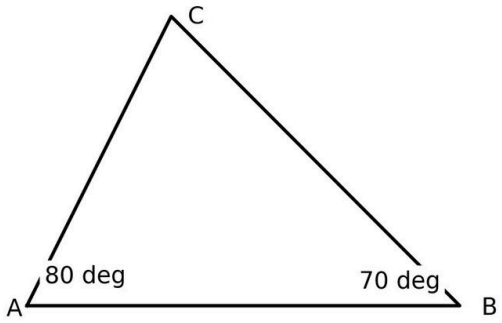
B 70°

C 110°

D 75°

Understand It with Pulse | Flag a mistake

20 **A triangle has two angles of 80° and 70°. The third angle is**



- **A** 150°
- **B** 100°
- **C** 30°
- **D** 45°

Understand It with Pulse | Flag a mistake

21 **Two angles sit on a straight line. One angle is 36°. The other angle is**

- A 36°
- B 154°
- C 144°
- D 324°

Understand It with Pulse | Flag a mistake

22 **A point is translated by the vector binom-3-3. The point moves**

- A 3 left and 3 up
- B 3 up and 3 right
- C 3 left and 3 down
- D 3 right and 3 down

Understand It with Pulse | Flag a mistake

23 **A shape with area 12 cm² is enlarged by scale factor 3. The area of the enlarged shape is**

- A 36 cm²
- B 324 cm²
- C 15 cm²
- D 108 cm²

Understand It with Pulse | Flag a mistake

24 **Each exterior angle of a regular polygon with 5 sides is**

- A 60°
- B 144°
- C 108°
- D 72°

Understand It with Pulse | Flag a mistake

25 **Two straight lines cross. One of the angles formed is 99°. The angle vertically opposite it is**

A 99°

B 90°

C 261°

D 81°

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. A
2. D
3. C
4. A
5. A
6. C
7. D
8. D
9. A
10. C
11. A
12. D
13. B
14. D
15. B
16. C
17. C
18. D
19. B
20. C
21. C
22. C
23. D
24. D
25. A

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