8.4 Geometry: Shapes, Angles and Lines: Test Pack

Calculators not allowed · about 45 minutes

Total Marks

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 A shape has four equal sides and four right angles. What is the name of this shape?

(1)

---

2 Angles on a straight line add up to 180 degrees. Two angles on a straight line are 35 degrees and 119 degrees. A third angle fills the rest of the line.

What is the third angle?

Answer: ___ degrees

(2)

© Revision Library | revisionlibrary.co.uk

3 A square has sides of length 57 km.

What is its perimeter?

Answer: ___ km

Diagram NOT accurately drawn



(1)

---

4 A rectangle is 21 km long and 21 km wide.

What is its perimeter?

Answer: ___ km

(2)

---

5 An angle measures 20 degrees. Is it acute, obtuse or reflex?

Answer: ___

(1)

© Revision Library | revisionlibrary.co.uk

6 A right angle is split into two angles. One of them is 70 degrees.

What is the other?

Answer: ___ degrees

(1)

---

7 I am a quadrilateral. I have 4 lines of symmetry and 2 pairs of parallel sides.

What shape am I?

Answer: ___

(2)

---

8 How many triangles can you make by drawing lines from one corner of a quadrilateral to every other corner it is not already joined to?

Answer: ___

(2)

---

9 How many sides does a octagon have?

Answer: ___

(1)

© Revision Library | revisionlibrary.co.uk

10 A right angle is split into two angles. One of them is 78 degrees.

What is the other?

Answer: ___ degrees

(1)

---

11 A right angle is split into two angles. One of them is 21 degrees.

What is the other?

Answer: ___ degrees

(1)

---

12 A rectangle measures 6 cm by 3 cm. How many right angles are inside the rectangle altogether? Give a reason.

(2)

---

13 How many vertices does a square-based pyramid have?

Answer: ___

(1)

---

14 Angles on a straight line add up to 180 degrees. One angle is 27 degrees.

What is the other angle?

Answer: ___ degrees

(1)

© Revision Library | revisionlibrary.co.uk

15 Angles on a straight line add up to 180 degrees. One angle is 137 degrees.

What is the other angle?

Answer: ___ degrees

(1)

---

16 An angle measures 62 degrees. Is it acute, obtuse or reflex?

Answer: ___

(1)

---

17 A square has sides of length 14 m.

What is its perimeter?

Answer: ___ m

Diagram NOT accurately drawn



(1)

© Revision Library | revisionlibrary.co.uk

18 How many triangles can you make by drawing lines from one corner of a pentagon to every other corner it is not already joined to?

Answer: ___

(2)

---

19 Is a rectangle a regular polygon? Explain your answer.

.....

.....

(2)

---

20 A square has sides of length 27 m.

What is its perimeter?

Answer: ___ m

Diagram NOT accurately drawn



(1)

© Revision Library | revisionlibrary.co.uk

21 What is the name of a polygon with 6 sides?

Answer: ___

(1)

---

22 An angle measures 90 degrees. Is this a right angle? Tick the correct answer: Yes or No.

- ☐ Yes
- ☐ No

---

23 A rectangle is 31 cm long and 24 cm wide.

What is its perimeter?

Answer: ___ cm

(2)

---

24 A right angle is split into two angles. One of them is 37 degrees.

What is the other?

Answer: ___ degrees

(1)

---

25 An angle measures 177 degrees. Is it acute, obtuse or reflex?

Answer: ___

(1)

© Revision Library | revisionlibrary.co.uk

26 An angle measures 53 degrees. Is it acute, obtuse or reflex?

Answer: ___

(1)

---

27 Angles on a straight line add up to 180 degrees. One angle is 23 degrees.

What is the other angle?

Answer: ___ degrees

(1)

---

28 Two lines meet and make a right angle. Are these lines perpendicular? Write Yes or No.

- ☐ Yes
- ☐ No

---

29 A right angle is split into two angles. One of them is 60 degrees.

What is the other?

Answer: ___ degrees

(1)

© Revision Library | revisionlibrary.co.uk

Mark scheme · 8.4 Geometry: Shapes, Angles and Lines: Test Pack

A correct answer earns full marks unless the question asks for working, a method, proof or explanation.

Question 1

square cao — B1

Answer: **square**

Question 2

154 seen — M1

26 degrees cao — A1

Answer: **26 degrees**

Question 3

228 km cao — B1

Answer: **228 km**

Question 4

adds all four sides or doubles l + w — M1

84 km cao — A1

Answer: **84 km**

Question 5

acute cao — B1

Answer: **acute**

Question 6

20 degrees cao — B1

Answer: **20 degrees**

Question 7

eliminates at least one shape — M1

square cao — A1

Answer: **square**

Question 8

identifies the corners not already joined — M1

2 cao — A1

Answer: **2**

Question 9

8 cao — B1

Answer: **8**

Question 10

12 degrees cao — B1

Answer: **12 degrees**

Question 11

69 degrees cao — B1

Answer: **69 degrees**

Question 12

4 identified cao — B1

Reason that each corner is a right angle oe — B1

Answer: **4; each of the four corners is a right angle**

Question 13

5 cao — B1

Answer: **5**

Question 14

153 degrees cao — B1

Answer: **153 degrees**

Question 15

43 degrees cao — B1

Answer: **43 degrees**

Question 16

acute cao — B1

Answer: **acute**

Question 17

56 m cao — B1

Answer: **56 m**

Question 18

identifies the corners not already joined — M1

3 cao — A1

Answer: **3**

Question 19

Correct identification (No) cao — B1

Reason that a rectangle does not have all sides equal oe — B1

Answer: **No; a rectangle can have opposite sides equal but not all four sides equal**

Question 20

108 m cao — B1

Answer: **108 m**

Question 21

hexagon cao — B1

Answer: **hexagon**

Question 22

Yes cao — B1

Answer: **Yes**

Question 23

adds all four sides or doubles l + w — M1

110 cm cao — A1

Answer: **110 cm**

Question 24

53 degrees cao — B1

Answer: **53 degrees**

© Revision Library | revisionlibrary.co.uk

Question 25

obtuse cao **B1**

Answer: **obtuse**

Question 26

acute cao **B1**

Answer: **acute**

Question 27

157 degrees cao **B1**

Answer: **157 degrees**

Question 28

Yes cao **B1**

Answer: **Yes**

Question 29

30 degrees cao **B1**

Answer: **30 degrees**

© Revision Library | revisionlibrary.co.uk