6.3 2D and 3D Shape Properties: 2-hour Pack

STA NC-KS1-MATHS-STA · Calculators not allowed · about 120 minutes

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 A hexagon and a octagon are put side by side.

Which shape has more corners, and how many more?

Answer: ___

(1)

---

2 Here are some flat shapes: triangle, hexagon, rectangle, circle, octagon, square, circle.

How many of the shapes has exactly 4 corners?

Answer: ___

(1)

© Revision Library | revisionlibrary.co.uk

3 George draws 3 triangles and 1 square.

How many corners are there altogether?

Answer: ___

(2)

---

4 This shape has four straight sides but two longer and two shorter sides.

Write the name of the shape.

Answer: ___

(1)

---

5 Here are some flat shapes: hexagon, pentagon, triangle, octagon, square, square, circle.

How many of the shapes has no corners?

Answer: ___

(1)

© Revision Library | revisionlibrary.co.uk

6 Here are some flat shapes: hexagon, hexagon, rectangle, hexagon, hexagon.

How many of the shapes has more than 4 sides?

Answer: ___

(1)

---

7 Here are some flat shapes: circle, triangle, octagon, octagon, pentagon, octagon, rectangle.

How many of the shapes has more than 4 sides?

Answer: ___

(1)

---

8 Yusuf has 2 triangular prisms.

How many vertices do they have altogether?

Answer: ___

(2)

© Revision Library | revisionlibrary.co.uk

9 Kiran has 5 square-based pyramids.

How many edges do they have altogether?

Answer: ___

(2)

---

10 A pentagon and a square are put side by side.

Which shape has more corners, and how many more?

Answer: ___

(1)

---

11 Sofia has 3 cylinders.

How many faces do they have altogether?

Answer: ___

(2)

© Revision Library | revisionlibrary.co.uk

12 This shape is round with no straight sides.

Write the name of the shape.

Answer: ___

(1)

---

13 Kofi draws 3 octagons and 4 hexagons.

How many sides are there altogether?

Answer: ___

(2)

---

14 Bella draws 4 pentagons and 4 squares.

How many sides are there altogether?

Answer: ___

(2)

© Revision Library | revisionlibrary.co.uk

15 Aaron has 3 cylinders.

How many vertices do they have altogether?

Answer: ___

(2)

---

16 Hassan draws 2 squares and 2 octagons.

How many sides are there altogether?

Answer: ___

(2)

---

17 Here are some flat shapes: square, pentagon, square, hexagon, triangle, triangle, hexagon.

How many of the shapes has 4 sides?

Answer: ___

(1)

---

18 Is a box of cereal a 2D shape or a 3D shape?

Answer: ___

(1)

© Revision Library | revisionlibrary.co.uk

19 Victor draws 3 octagons and 3 triangles.

How many sides are there altogether?

Answer: ___

(2)

---

20 This shape has six straight sides and six corners.

Write the name of the shape.

Answer: ___

(1)

---

21 Which flat shape has 6 sides?

Answer: ___

(1)

---

22 Quinn has 4 cuboids.

How many vertices do they have altogether?

Answer: ___

(2)

© Revision Library | revisionlibrary.co.uk

23 Here are some flat shapes: triangle, hexagon, rectangle, hexagon, octagon, circle, square.

How many of the shapes has 3 corners?

Answer: ___

(1)

---

24 Jack draws 4 octagons and 2 rectangles.

How many sides are there altogether?

Answer: ___

(2)

---

25 Ben draws 1 rectangle and 3 squares.

How many corners are there altogether?

Answer: ___

(2)

© Revision Library | revisionlibrary.co.uk

26 A rectangle and a pentagon are put side by side.

Which shape has more corners, and how many more?

Answer: ___

(1)

---

27 Here are some flat shapes: pentagon, triangle, square, triangle, triangle, circle, octagon.

How many of the shapes has exactly 4 corners?

Answer: ___

(1)

---

28 Here are some flat shapes: pentagon, pentagon, square, triangle, octagon.

How many of the shapes has exactly 4 corners?

Answer: ___

(1)

© Revision Library | revisionlibrary.co.uk

29 Here are some flat shapes: hexagon, pentagon, square, octagon, circle, rectangle, octagon.

How many of the shapes has 4 sides?

Answer: ___

(1)

---

30 Callum has 5 cones.

How many edges do they have altogether?

Answer: ___

(2)

---

31 Olu has 3 triangular prisms.

How many vertices do they have altogether?

Answer: ___

(2)

© Revision Library | revisionlibrary.co.uk

32 A square-based pyramid has flat faces. What shape is one of its flat faces? (Choose the shape that is on its faces most.)

Answer: ___

(1)

---

33 I am a solid shape. I have 1 square face and 4 triangle faces.

What shape am I?

Answer: ___

(1)

---

34 A hexagon and a rectangle are put side by side.

Which shape has more corners, and how many more?

Answer: ___

(1)

---

35 Look at the pattern. What comes next?

triangle, square, square, triangle, square, square, triangle, square, ___

Answer: ___

(1)

© Revision Library | revisionlibrary.co.uk

36 Which flat shape has 3 sides?

Answer: ___

(1)

---

37 Ivan draws 3 squares and 2 hexagons.

How many sides are there altogether?

Answer: ___

(2)

---

38 A pentagon has five sides.

Write how many sides a pentagon has.

Answer: ___

(1)

---

39 A square and a triangle are put side by side.

Which shape has more sides, and how many more?

Answer: ___

(1)

© Revision Library | revisionlibrary.co.uk

40 Hassan has 5 triangular prisms.

How many vertices do they have altogether?

Answer: ___

(2)

---

41 Oscar has 4 cubes.

How many faces do they have altogether?

Answer: ___

(2)

---

42 Kofi draws 4 rectangles and 1 square.

How many corners are there altogether?

Answer: ___

(2)

© Revision Library | revisionlibrary.co.uk

43 Ravi draws 3 triangles and 4 hexagons.

How many corners are there altogether?

Answer: ___

(2)

---

44 Ella has 3 triangular prisms.

How many faces do they have altogether?

Answer: ___

(2)

---

45 Here are some flat shapes: octagon, rectangle, pentagon, pentagon, triangle, triangle, hexagon.

How many of the shapes has fewer than 5 corners?

Answer: ___

(1)

© Revision Library | revisionlibrary.co.uk

46 Here are some flat shapes: pentagon, rectangle, square, rectangle, circle.

How many of the shapes has more than 4 sides?

Answer: ___

(1)

---

47 Hassan has 2 square-based pyramids.

How many vertices do they have altogether?

Answer: ___

(2)

---

48 A rectangle has four corners.

Write how many vertices (corners) a rectangle has.

Answer: ___

(1)

© Revision Library | revisionlibrary.co.uk

49 Ivan has 5 cones.

How many vertices do they have altogether?

Answer: ___

(2)

---

50 Is a tin of beans a 2D shape or a 3D shape?

Answer: ___

(1)

---

51 A cone has flat faces. What shape is one of its flat faces? (Choose the shape that is on its faces most.)

Answer: ___

(1)

---

52 Zara draws 4 hexagons and 3 octagons.

How many corners are there altogether?

Answer: ___

(2)

© Revision Library | revisionlibrary.co.uk

53 Which flat shape has 5 sides?

Answer: ___

(1)

---

54 I am a solid shape. I have 6 faces and 12 edges. My faces are rectangles. I am not a cube.

What shape am I?

Answer: ___

(1)

---

55 Here are some flat shapes: circle, triangle, circle, triangle, pentagon.

How many of the shapes has no corners?

Answer: ___

(1)

---

56 A cylinder has flat faces. What shape is one of its flat faces? (Choose the shape that is on its faces most.)

Answer: ___

(1)

© Revision Library | revisionlibrary.co.uk

57 Look at the pattern. What comes next?

circle, square, triangle, circle, square, triangle, circle, ___

Answer: ___

(1)

---

58 Here are some flat shapes: rectangle, octagon, triangle, rectangle, circle, rectangle, rectangle.

How many of the shapes has more than 4 sides?

Answer: ___

(1)

---

59 How many sides does a octagon have?

Answer: ___

(1)

© Revision Library | revisionlibrary.co.uk

60 Here are some flat shapes: pentagon, pentagon, pentagon, square, octagon, hexagon, pentagon.

How many of the shapes has exactly 4 corners?

Answer: ___

(1)

---

61 How many faces does a sphere have?

Answer: ___

(1)

---

62 Ella has 4 square-based pyramids.

How many edges do they have altogether?

Answer: ___

(2)

© Revision Library | revisionlibrary.co.uk

Mark scheme · 6.3 2D and 3D Shape Properties: 2-hour Pack

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

Question 1

octagon, 2 more cao — B1

Answer: **octagon, 2 more**

Question 2

2 cao — B1

Answer: **2**

Question 3

one correct product seen — M1

13 cao — A1

Answer: **13**

Question 4

rectangle cao — B1

Answer: **rectangle**

Question 5

1 cao — B1

Answer: **1**

Question 6

4 cao — B1

Answer: **4**

Question 7

4 cao — B1

Answer: **4**

Question 8

6 vertices for one triangular prism — M1

12 cao — A1

Answer: **12**

Question 9

8 edges for one square-based pyramid — M1

40 cao — A1

Answer: **40**

Question 10

pentagon, 1 more cao — B1

Answer: **pentagon, 1 more**

Question 11

3 faces for one cylinder — M1

9 cao — A1

Answer: **9**

Question 12

circle cao — B1

Answer: **circle**

Question 13

one correct product seen — M1

48 cao — A1

Answer: **48**

Question 14

one correct product seen — M1

36 cao — A1

Answer: **36**

Question 15

0 vertices for one cylinder — M1

0 cao — A1

Answer: **0**

Question 16

one correct product seen — M1

24 cao — A1

Answer: **24**

Question 17

2 cao — B1

Answer: **2**

Question 18

3D cao — B1

Answer: **3D**

Question 19

one correct product seen — M1

33 cao — A1

Answer: **33**

Question 20

hexagon cao — B1

Answer: **hexagon**

Question 21

hexagon cao — B1

Answer: **hexagon**

Question 22

8 vertices for one cuboid — M1

32 cao — A1

Answer: **32**

Question 23

1 cao — B1

Answer: **1**

© Revision Library | revisionlibrary.co.uk

Question 24

one correct product seen — M1
40 cao — A1
Answer: **40**

Question 25

one correct product seen — M1
16 cao — A1
Answer: **16**

Question 26

pentagon, 1 more cao — B1
Answer: **pentagon, 1 more**

Question 27

1 cao — B1
Answer: **1**

Question 28

1 cao — B1
Answer: **1**

Question 29

2 cao — B1
Answer: **2**

Question 30

1 edges for one cone — M1
5 cao — A1
Answer: **5**

Question 31

6 vertices for one triangular prism — M1
18 cao — A1
Answer: **18**

Question 32

triangle cao — B1
Answer: **triangle**

Question 33

square-based pyramid cao — B1
Answer: **square-based pyramid**

Question 34

hexagon, 2 more cao — B1
Answer: **hexagon, 2 more**

Question 35

square cao — B1
Answer: **square**

Question 36

triangle cao — B1
Answer: **triangle**

Question 37

one correct product seen — M1
24 cao — A1
Answer: **24**

Question 38

5 cao — B1
Answer: **5**

Question 39

square, 1 more cao — B1
Answer: **square, 1 more**

Question 40

6 vertices for one triangular prism — M1
30 cao — A1
Answer: **30**

Question 41

6 faces for one cube — M1
24 cao — A1
Answer: **24**

Question 42

one correct product seen — M1
20 cao — A1
Answer: **20**

Question 43

one correct product seen — M1
33 cao — A1
Answer: **33**

Question 44

5 faces for one triangular prism — M1
15 cao — A1
Answer: **15**

Question 45

3 cao — B1
Answer: **3**

Question 46

1 cao — B1
Answer: **1**

Question 47

5 vertices for one square-based pyramid — M1
10 cao — A1
Answer: **10**

Question 48

4 cao — B1
Answer: **4**

Question 49

1 vertices for one cone — M1
5 cao — A1
Answer: **5**

© Revision Library | revisionlibrary.co.uk

Question 50

3D cao — **B1**

Answer: **3D**

Question 51

circle cao — **B1**

Answer: **circle**

Question 52

one correct product seen — **M1**

48 cao — **A1**

Answer: **48**

Question 53

pentagon cao — **B1**

Answer: **pentagon**

Question 54

cuboid cao — **B1**

Answer: **cuboid**

Question 55

2 cao — **B1**

Answer: **2**

Question 56

circle cao — **B1**

Answer: **circle**

Question 57

square cao — **B1**

Answer: **square**

Question 58

1 cao — **B1**

Answer: **1**

Question 59

8 cao — **B1**

Answer: **8**

Question 60

1 cao — **B1**

Answer: **1**

Question 61

1 cao — **B1**

Answer: **1**

Question 62

8 edges for one square-based pyramid — **M1**

32 cao — **A1**

Answer: **32**

© Revision Library | revisionlibrary.co.uk