

Shapes and Patterns

Mathematics · Class 1 · Topic-wise Practice Worksheet

TIME 30 minutes	QUESTIONS 15	TOTAL MARKS 18	MAX. SCORE ___ / 18
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Name: _____ Class/Sec: _____ Date: _____

INSTRUCTIONS

- There are **15 questions**. Answer all of them.
- Each question has four choices — (A), (B), (C) and (D). Only **one** is correct.
- Questions 1–12 carry **1 mark** each. Questions 13–15 carry **2 marks** each.
- There is no negative marking. Look at every picture carefully.

Section A — Knowing Shapes

Q1–Q8 · 1 mark each

1. How many sides does a triangle have?

- (A) 2 (B) 3
(C) 4 (D) 5

2. Which shape is round and has **no** corners?

- (A) Circle (B) Triangle
(C) Square (D) Rectangle

3. Look at the shapes below. Which one is a **rectangle**?

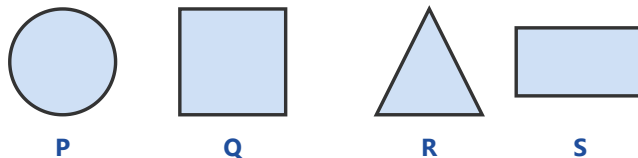


Fig. 3.1

- (A) P (B) Q
(C) R (D) S

4. How many corners does a square have?

- (A) 2 (B) 3
(C) 4 (D) 6

5. A ball has the same shape as a _____.

- (A) Sphere (B) Cube
(C) Cone (D) Cylinder

6. A dice has the same shape as a ____.
- (A) Circle (B) Sphere
(C) Cone (D) Cube
7. Which of these solid shapes can **roll**?
- (A) Ball (B) Cube
(C) Box (D) Book
8. How many sides does a rectangle have?
- (A) 3 (B) 4
(C) 5 (D) 6

Section B — Patterns

Q9–Q12 · 1 mark each

9. Look at the pattern. Which shape should come in the empty box?



Fig. 9.1

- (A) A triangle (B) A square
(C) A circle (D) A rectangle
10. Which shape does **not** belong with the others?
- (A) Square (B) Rectangle
(C) Triangle (D) Circle
11. Count the triangles in the picture. How many are there?



Fig. 11.1

- (A) 2 (B) 3
(C) 4 (D) 5
12. What comes next in this pattern? 1, 2, 3, 1, 2, 3, 1, ____
- (A) 1 (B) 2
(C) 3 (D) 4

13. Two squares are drawn side by side. How many corners are there in all?

(A) 4

(B) 6

(C) 8

(D) 16

14. Which shape has **4 sides that are all equal**?

(A) Square

(B) Rectangle

(C) Triangle

(D) Circle

15. A shape has 3 corners and 3 straight sides. Which shape is it?

(A) Circle

(B) Square

(C) Triangle

(D) Rectangle

Answer Key

1	B	2	A	3	D	4	C	5	A
6	D	7	A	8	B	9	C	10	D
11	B	12	B	13	C	14	A	15	C

Solutions

1. Answer: (B) 3

'Tri' means three. A triangle has **3** straight sides and 3 corners.

2. Answer: (A) Circle

A **circle** is made of one curved line all the way round, so it has no straight sides and no corners.

3. Answer: (D) S

A rectangle has 4 corners with two long sides and two short sides. That is shape **S**. P is a circle, Q is a square (all sides equal) and R is a triangle.

4. Answer: (C) 4

A square has 4 equal sides and **4** corners.

5. Answer: (A) Sphere

A ball is perfectly round all over, and that solid shape is called a **sphere**.

6. Answer: (D) Cube

A dice has 6 flat square faces, so it is a **cube**.

7. Answer: (A) Ball

A **ball** is curved all over, so it rolls easily. Cubes, boxes and books have flat faces and only slide.

8. Answer: (B) 4

A rectangle has **4** sides — two long and two short — and 4 corners.

9. Answer: (C) A circle

The pattern repeats triangle, circle, triangle, circle, triangle, ... The shape after a triangle is always a **circle**.

10. Answer: (D) Circle

Squares, rectangles and triangles are all made of straight sides and have corners. A **circle** has no straight sides and no corners, so it is the odd one out.

11. Answer: (B) 3

Count only the shapes with three sides. There are **3** triangles; the last shape is a square, not a triangle.

12. Answer: (B) 2

The pattern repeats 1, 2, 3 over and over. After a 1 always comes a **2**.

13. Answer: (C) 8

Each square has 4 corners.

$4 + 4 = \mathbf{8}$ corners in all.

14. Answer: (A) Square

A **square** has 4 sides of exactly the same length. A rectangle also has 4 sides, but two of them are longer than the other two.

15. Answer: (C) Triangle

Only a **triangle** has exactly 3 sides and 3 corners. A square and a rectangle each have 4, and a circle has none.