# Mathematics

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(Chapter 5) (Understanding Elementary Shapes) (Practice Test - 6)

(Class VI)

**Time Allowed: 1 Hour 15 Minutes** **Maximum Marks: 25**

**General Instructions:**

- This question paper contains four sections – A, B, C, D. Each part is compulsory.
- Section – A has 5 MCQ of one mark each.
- Section – B has 3 questions of two marks each.
- Section – C has 3 questions of three marks each.
- Section – D has 2 questions of five marks each, attempt any 1 out of 2.
- There is no negative marking.

## Section – A

1. A circle of radius r cm has diameter of length

(A) r cm (B) 2r cm (C) 4r cm (D) r/2 cm

2. An angle of measure 180° is called

(A) a zero angle (B) a right angle (C) a straight angle (D) a reflex angle

3. The measure of an obtuse angle < 90°

(A) True (B) False (C) None of these

4. All the sides of a rhombus are of equal length.

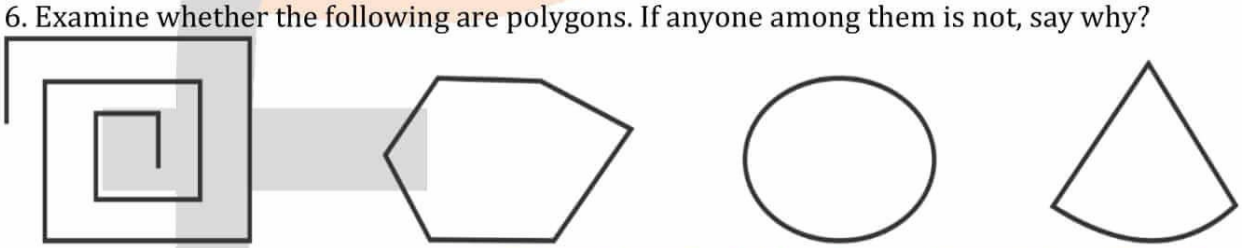
(A) True (B) False (C) None of these

5. A quadrilateral whose each angle is a right angle is a

(A) square (B) rectangle (C) rhombus (D) parallelogram

## Section – B

6. Examine whether the following are polygons. If anyone among them is not, say why?



(i) (ii) (iii) (iv)

7. Give reasons for the following:

A square can be thought of as a special rectangle.

8. Give reasons for the following:

Squares, rectangles, parallelograms are all quadrilaterals.

## Section – C

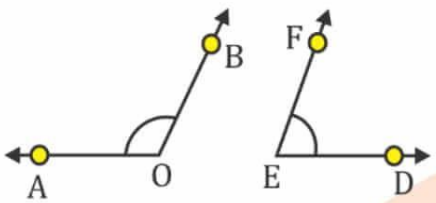
9. What fraction of a clockwise revolution does the hour hand of a clock turn through, when it goes from

(A) 12 to 9

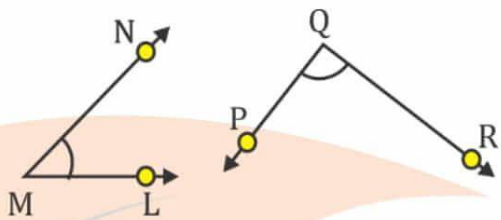
(B) 1 to 10

(C) 6 to 3

10. By simply looking at the pair of angles given in Figure, state which of the angles in each of the pairs is greater:




(i)

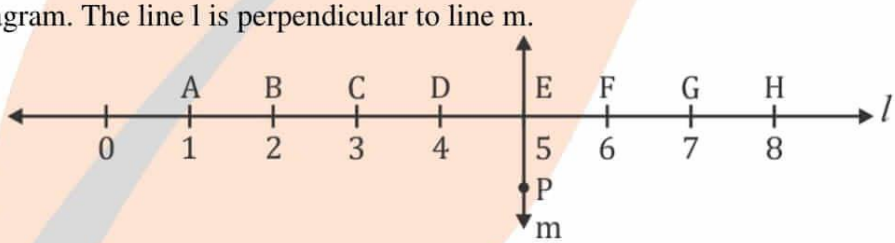



(ii)

11. What is the measure of the angle in degrees between:
(A) North and West?
(B) North and South?
(C) North and South- East?

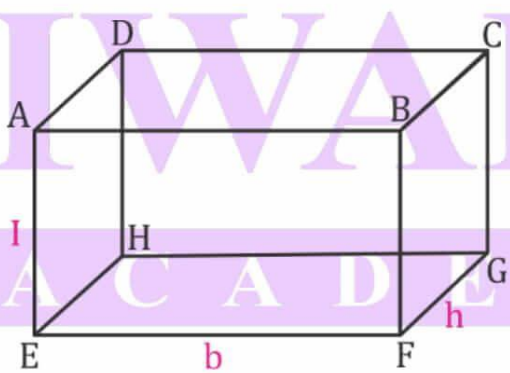
**Section – D**

12. Study the diagram. The line l is perpendicular to line m.




(A) Is CE = EG?
(B) Does PE bisect CG?
(C) Identify any two line segments for which PE is the perpendicular bisector.
(D) Are these true?
(i) AC > FG
(ii) CD = GH
(iii) BC < EH

13. The lengths of the edges AE, EF, and FG are indicated as l, b and h respectively. Indicate the lengths of all other edges.



## Answers

**Section – A**

1. 2r cm
2. A straight angle
3. False
4. True
5. Rectangle

**Section - B**

6. (i) It is not a closed figure. Hence, it is not a polygon.
(ii) It is a polygon.
(iii) No it is not a polygon because it is not made of line segments
(iv) It is not a polygon as it is not made of line segments.

7. A rectangle in which all the interior angles are of same measure i.e. 90°and only opposite sides of the rectangle are of same length whereas in square all the interior angles are of 90° and all the sides of the square are of same length. Hence, a rectangle with all sides equal becomes a square. Therefore, square is a special rectangle.

8. Since, all are closed figures with 4 line segments. Hence all are quadrilaterals.

**Section – C**

9.
(A) 3 / 4
(B) 3 / 4
(C) 3 / 4

10.
(i) ∠AOB > ∠DEF
(ii) ∠PQR > ∠LMN

11.
(A) 90°.
(B) 180°
(C) 135°.

**Section – D**

12. (A) Yes
(B) Yes
(C) $\overline{BH}$ and $\overline{DF}$ are the line segments for which PE is the perpendicular bisector
(i) True
(ii) True
(iii) True

13. AE = DH = BF = CG = l
EF = HG = AB = DC = b
FG = EH = BC = AD = h