EXERCISE

OBJECTIVE TYPE

Q.1 Which solid does not have any square faces ?

(A) Cube (B) Cuboid (C) Cone (D) Square pyramid

Q.2 Cricket ball is an example of a

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

Q.3 If you are facing east and turn clock wise through 270°, which direction would you face ?

(A) South (B) West (C) East (D) North

Q.4 Through how many degree does the hour hand of a clock turn in 5 minutes ?

(A) $\frac{1}{2}^o$ (B) $3\frac{1}{2}^o$ (C) 5° (D) $2\frac{1}{2}^o$

Q.5 An acute angle is formed between the hands of a clock at

(A) 9 O' clock (B) 4 O' clock (C) 11 O' clock (D) 6 O' clock

Q.6 The angle between two oppoite rays is

(A) right (B) obutuse (C) acute (D) straight

Q.7 Which of the following is an obtuse angle?

(A) 92° (B) 181 ° (C) 195° (D) 83°

Q.8 How many parallel lines are there in the capital letter N ?

(A) One (B) Three (C) Two (D) Four

Q.9 Which of the following letter of the alphabet is made up of only two lines which are perpendicular to each other?

(A) H (B) T (C) F (D) I

Q.10 A figure is said to be regular, if its sides are equal in length and angles are equal in measure. Can you identify the regular quadrilateral ?

(A) Paralleogram (B) Rhombus (C) Square (D) Rectangle

Q.11 Which quadrilateral is not a parallelogram ?

(A) Rectangle (B) Trapezium (C) Square (D) Rhombus

Q.12 Which of the following is a regular polygon ?

(A) Isosceles triangle (B) Rectangle (C) Square (D) Scalene triangle

Q.13 Which of the following is NOT true?

(A) All rhombuses are parallelograms.

(B) Some trapeziums are rectangles.

(C) All squares are rectangles.

(D) Some rhombuses are squares.

Q.14 If a suiid shape is completely bounded by plane faces.

The least number of faces it may have is

(A) 4 (B) 5 (C) 6 (D) 3

Q.15 Which solid has the greatest number of faces ?

(A) Cone (B) Cylinder (C) Triangular Prism (D) Cube

Q.16 A cuboid has

(A) length only. (B) length and breadth only.

(C) length, breadth and height. (D) thickness only.

Q.17 When two lines intersect and the angle between them is a right angle, then the lines are said to be

(A) coincident. (B) parallel. (C) perpendicular. (D) perpendicular bisector.

Q.18 A square pyramid has

(A) 2 faces and 6 edges. (B) 4 faces and 6 edges.

(C) 5 faces and 8 edges. (D) 5 faces and 10 edges.

Q.19 In a triangle if the length of all the sides are different, then it is called a/an

(A) scalene triangle. (B) isosceles triangle.

(C) equilateral triangle. (D) right angled triangle.

Q.20 The surface of a solid is called :

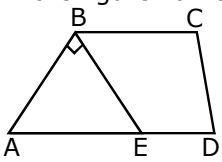
(A) edge. (B) face. (C) vertex. (D) corner.

SUBJECTIVE TYPE

Q.1 Through how many degrees does the minutes' hand of a clock turn in :

(i) 8 minutes (ii) $\frac{3}{4}$ hour (iii) $1\frac{1}{2}$ hours

Q.2 In the figure name the following angles :



(a) an acute angle at B

(b) an acute angle at E

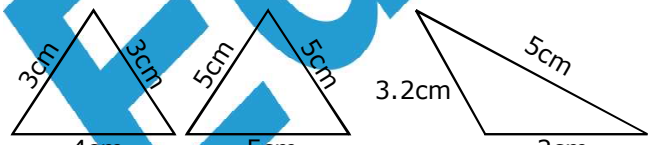
(c) a straight angle

Q.3 Classify the angles whose magnitudes are given below:

(i) 122º (ii) 17º (iii) 89.9º

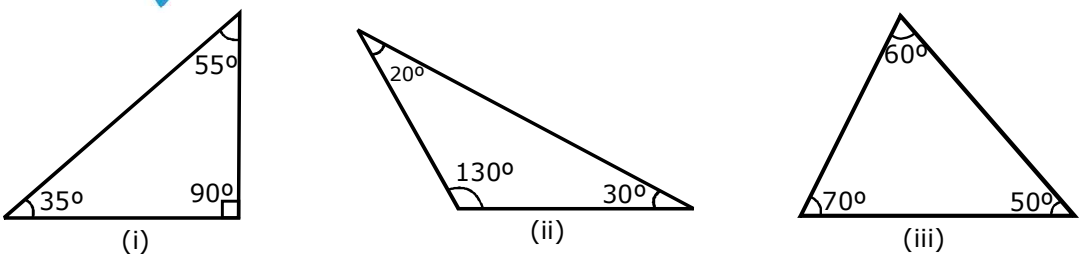
(iv) 257º (v) 360º

Q.4 State for each of the triangles shown in the fipure whether it is scalene ,isosceles or equilateral.



(i) (ii) (iii)

Q.5 State for each of the triangles shown in the figure whether it is acute, right or obtuse:



(i) (ii) (iii)

Q.6 John turns right three times. How many degrees does he turn through?

Q.7 A boat is sailing N-E. A later it is formed sailing South. Through what angle has it turned ?

Q.8 Answer True (T) or False (F).

(i) Each face of a cuboid has 4 edges.

(ii) A cone has two circular faces

(iii) A triangular pyramid has 8 edges.

(iv) Sphere is a solid figure with no edge and no vertex.

(v) A brick has the shape of a cube.

Q.9 If BD = 2 BA + AD and LM = 3 LP - PM, find which one is greater BD or LM ?

Given that BA = 3 cm , AD = 2.5 cm, LP = 4 cm and PM= 1.5 cm.

Q.10 Fill in the blanks:

(i) When the sum of the measures of two angles is that of a right angle, then each one of them is _____ .

(ii) When the sum of the measure of two angles is that of a straight angle one of them should be obtuse or _____ .

(iii) A line segment can be measured by an instrument called _____ .

(iv) We are facing North and we turn east clockwise, the angle formed is _____ .

(v) One complete revolution is a _____ angle.

Q.11 Give reasons for :

(i) A square can be thought of as a special rectangle.

(ii) A rectangle can be thought of as a special parallelogram.

(iii) A square can be thought of as a special rhombus.

(iv) Squares, rectangles, parallelograms are all quadrilaterals.

(v) Square is also a parallelogram.

Q.12 How many degrees are there in :

(i) One right angle ?

(ii) Two right angles ?

(iii) Three right angles ?

(iv) $\frac{2}{3}$ right angle ?

ANSWER KEY

UNDERSTANDING GEOMETRICAL SHAPES

OBJECTIVE :

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

SUBJECTIVE :

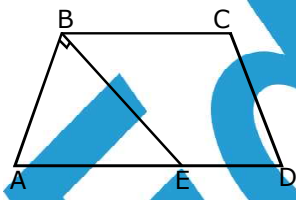
1. (i) In 8 min min. hand turns $\frac{8 \times 360°}{60} = 48°$

(ii) In $\frac{3}{4}$ hour min. hand turns $360° \times \frac{3}{4} = 270°$

(iii) In $1\frac{1}{2}$ hours min hand turns

$360° \times \frac{3}{2} = 540°$

2.



(i) acute angle at B is ∠EBC

(ii) acute angle at E is ∠BEA

(iii) Straight angle is ∠AED

3. (i) obtuse (ii) acute (iii) acute

(iv) reflecx (v) complete

4. (i) Isosceles Triangle

(ii) Equilateral Triangle

(iiii) Scalene triangle

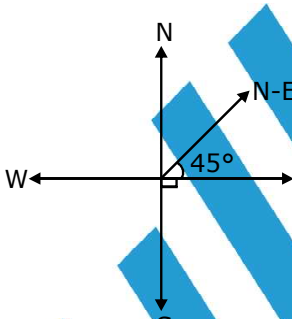
5. (i) Right angle triangle

(ii) Obtuse angle triangle

(iii) Acute angle triangle

6. Three right angles = 3 × 90° = 270°

7.



Angle turned by boat is 90° + 45° = 135°

8. (i) True (ii) False

(iii) False (iv) True

(v) False

9. BD = 2BA + AD

= 2 × 3 + 2.5 = 6 + 2.5 = 8.5 cm

LM = 3LP – PM

= 3 × 4 – 1.5 = 12 – 1.5 = 10.5 cm

Therefore, LM > BD

10. (i) acute (ii) right - angle

(iii) scale (iv) right angle

(v) complete

11. (i) all the properties of a rectangle are there in a square

(ii) All the properties of a parallelogram are there in a rectangle

(iii) All the properties of a parallelogram are there in a square

(iv) All four sided closed plane figures are known as quadrilateral

(v) All the properties of a parallelogram are there in a square

12. (i) 90° (ii) 180°

(iii) 270° (iv) 60°