

NISCORT FATHER AGNEL SCHOOL, VAISHALI (2017-18)
SELF LEARNING WORKSHEET
CLASS-VI
TOPIC-BASIC GEOMETRICAL IDEAS

1. Fill in the blank

i) Distance around a circle is its _____.

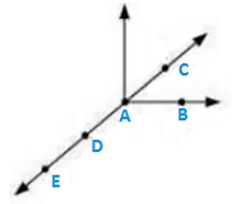
ii) In given line

AE = AD + _____

DE = CE - _____

DC = AD + _____

iii) An angle is formed by two _____ with same initial points called vertex.



2. Match the following



a) Line

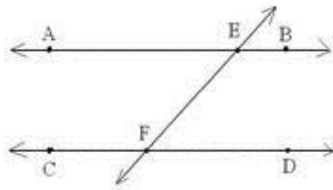


b) Line Segment



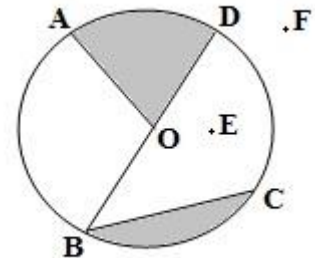
c) Ray

3. Name the intersecting pairs of line and points of intersection.



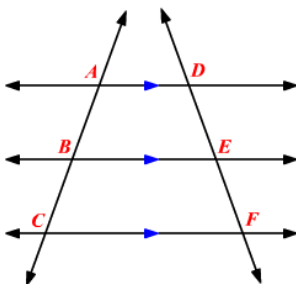
4. In the following figure, answer the questions :-

- i) Name the diameter of circle _____.
- ii) Name any radius of circle _____.
- iii) Name the centre of the circle _____.
- iv) Name the chord of circle other than diameter _____.
- v) One interior point in the circle _____.
- vi) A point on the circle _____.
- vii) Any exterior point of circle _____.



5. What are collinear points? How many lines can be drawn through 3 collinear points?

6. From the adjoining figure answer the following:-



- a) 4 pairs of intersecting lines
- b) 3 collinear points
- c) 3 non collinear points
- d) 4 pairs of parallel lines

7. Construct a line segment whose length is the sum of two segments measuring 2.4 cm and 3.6cm.

8. If $AB=6.2$ cm and $CD =4.3$ cm, construct the following line segments-

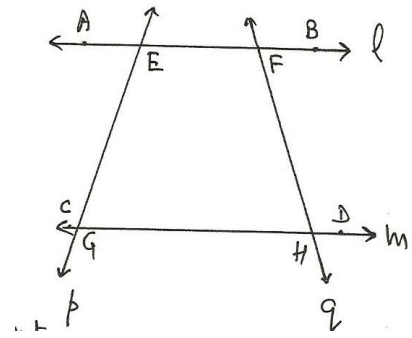
a) $2 AB$ b) $2AB-CD$ c) $AB +CD$

9. From the adjoining figure write-:

a) Five line segments

b) Five rays

c) Non intersecting line segments

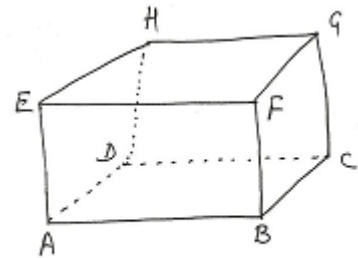


10. From the adjoining figure (Cuboid) write -:

a) Points marked

b) Line segments

c) Planes



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CLASS VI
CHAPTER: UNDERSTANDING GEOMETRICAL SHAPES

Choose the correct option:-

Q1. The angle formed between the east and the north direction is _____

- a) 60°
- b) 80°
- c) 90°
- d) 180°

Q2. A triangle can have _____ right angles.

- a) One
- b) Two
- c) Three
- d) None of these

Q3. If a bicycle wheel has 36 spokes , then the angle between a pair of adjacent spokes is

- a) 10°
- b) 15°
- c) 12°
- d) 20°

Q4. An angle more than 180° and less than 270° is called

- a) Zero angle
- b) Right angle
- c) Reflex angle
- d) Straight angle

Q5. What fraction of a clockwise revolution does the hour hand of a clock turn through, when it goes from

- (a) 6 to 12 (b) 5 to 8

Q6. Which direction will you face if you start facing

- (i) West and make $\frac{1}{2}$ of a revolution clockwise?
- (ii) East and make one full revolution?

Q7. What part of a revolution have you turned through if you stand facing (i) North and turn clockwise to face west?

- (ii) South and turn anticlockwise to face west?

Q8. Where will the hour hand of a clock stop if it starts:

- (i) from 7 and turns through 1 right angle?
- (ii) from 11 and turns through 3 right angles?

Q9. Fill in the blanks using appropriate signs ($<$, $>$ or $=$)

- (i) The measure of one complete angle..... 360°
- (ii) The measure of reflex angle 180°
- (iii) The measure of an obtuse angle 90°
- (iv) The measure of an acute angle 90°
- (v) The measure of right angle 90°

Q10. Write all the alphabets that are made of perpendicular lines.

Q11 Name the type of triangles:

- (i) 6.5 cm, 8cm, 8.5 cm
- (ii) 9 cm, 9 cm, 9 cm
- (iii) 30° , 60° , 90°
- (iv) 99° , 50° , 31°

(v) $46^\circ, 58^\circ, 76^\circ$

(vi) $\triangle ABC$ with $\angle B=90^\circ, AB = BC = 6\text{cm}$

Q12. Fill in the blanks:

- (i) The opposite sides of a rectangle are
- (ii) A rectangle whose adjacent sides are equal is called.....
- (iii) The opposite sides of a parallelogram are and
- (iv) A is a rectangle with a pair of adjacent sides equal.
- (v) One right angle = of a revolution

Q13. Make the statement true using 'All' or 'some' or 'no'

- (i)parallelograms are quadrilaterals.
- (ii)parallelograms are also trapeziums.
- (iii)rhombuses are squares.
- (iv)trapeziums are quadrilaterals.
- (v)squares are rhombuses.
- (vi)trapeziums are isosceles.
- (vii)equilateral triangles are isosceles.

Q14. Complete the following table:

S.No	Solid Figure	Vertices	Faces	Edges
1	Cuboid			
2	Cone			
3	Cube			
4	Cylinder			
5	Sphere			
6	Triangular Pyramid			
7	Square Pyramid			
8	Triangular Prism			

15. Find the angle measure between the hands of the clock in each figure:

a)



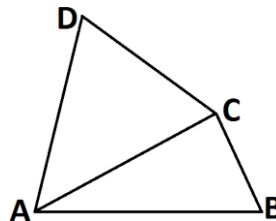
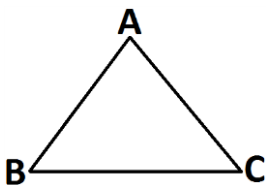
b)



16. A ship sailing in river Jhelam moves towards east. If it changes to north, through what angle does it turn?

17. A bicycle wheel makes four and a half turns. Find the number of right angles through which it turns.

18. How many angles are formed in the figures (i) and (ii)? Name them.



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SELF LEARNING WORKSHEET
CLASS-VI
TOPIC-INTEGERS

I. Using the following number line, fill in the blanks:

- (i) An integer, on the given number line, is _____ than every number on its left
- (ii) An integer, on the given number line, is greater than every number on its _____.
- (iii) 4 is greater than -4 implies 4 is on the _____ of -4.
- (iv) -5 is _____ than 3 and 7 is _____ than -5.
- (v) -6 is _____ than -10 and 3 is _____ than 9.
- (vi) 8 is _____ than 0 and -6 is _____ than -1.
- (vii) -7 is _____ than 6 and opposite of -4 is _____ than opposite of -9.
- (viii) -12 is _____ than -8 and -10 is _____ than opposite of 5.
- (ix) If +15 represents gain of Rs.15; then +45 represents _____; and -75 represents _____.
- (x) If 30 m below sea level is represented by -30; then -95 represents _____; and +450 represents _____.
- (xi) If fall in temperature by 15° C is denoted by +15, then -115 denotes _____; and +47 denotes _____.
- (xii) Absolute value of +24 is _____ and absolute value of -35 is _____.
- (xiii) $|-11| =$ _____, $|+11| =$ _____ and $-|-11| =$ _____.
- (xiv) If absolute value of a number = the number itself; then the number is _____ or _____
- (xv) The opposite of +46 is _____ and that of -88 is _____

II. Find the integer, using the number line, which is:

- (i) 5 more than 3 (ii) 9 less than 4
- (iii) 12 more than -4 (iv) 8 less than 3
- (v) 7 less than 0 (vi) 4 less than -6

III. State whether the statements are true or false:

- (i) The smallest integer is 0.
- (ii) The opposite of -17 is 17
- (iii) The opposite of zero is zero.
- (iv) Every negative integer is smaller than 0.
- (v) 0 is greater than every positive integer.
- (vi) Since, zero is neither negative nor positive; it is not an integer.

IV. Fill in the blanks in each case given below:

Quantity	Opposite of the quantity
(i) Profit of Rs.80	_____
(ii) Going 50 km towards East	_____
(iii) _____	Going 60 m below the sea level
(iv) _____	Gaining Rs.3250
(v) _____	Going 37 m due North
(vi) Losing weight of 4.7 kg	_____
(vii) A decrease of 23%	_____
(viii) _____	Rise of 55% of the cost.
(ix) 22m towards left	_____
(x) _____	17° above 33°
(xi) _____	Withdrawing Rs.235 from a bank.
(xii) Giving Rs.1000 to Ron	_____

V. Fill in the blanks by < or > to make the statement true:

- | | |
|-------------------|-----------------------|
| (i) 3 _____ 0 | (v) 5 _____ -1 |
| (ii) 0 _____ -8 | (vi) -13 _____ 0 |
| (iii) -9 _____ -3 | (vii) -8 _____ -18 |
| (iv) -3 _____ 3 | (viii) 516 _____ -316 |

VI. Add the following integers:

- | | |
|----------------------|----------------------|
| (i) + 84 and + 45 | (ii) - 63 and - 23 |
| (iii) -44 and + 35 | (iv) +12 and -20 |
| (v) + 2245 and -1013 | (vi) -260 and 0 |
| (vii) -57 and -476 | (viii) 274 and - 342 |
| (ix) + 145 and +264 | (x) - 814 and +415 |

VII. Evaluate the following:

- | | |
|-----------------------|----------------------|
| (i) (+423) + (253) | (ii) (-423) + (+253) |
| (iii) (+423) + (-253) | (iv) (-423) + (-253) |

VIII. Find the value of the following:

(i) $3 + 4 + (-6) + (-6) + 2$

(ii) $11 + 53 + (-40) - 29$

(iii) $(-98) + (-43) + 69 + 77$

(iv) $41 + (-73) + 23 - 85$

IX. Subtract the following:

(i) + 9 from + 12

(ix) 346 from 293

(ii) + 15 from - 21

(x) -80 from 0

(iii) - 42 from + 74

(xi) 0 from +39

(iv) - 10 from + 25

(xii) -59 from -100

(v) 7 from 15

(xiii) -350 from 200

(vi) +7 from -15

(xiv) 63 from -63

(vii) -7 from +15

(xv) 0 from -247

(viii) -7 from 15

(xvi) -55 from +55

X. Fill in the blanks:

(i) $(-9) - \dots = 15$

(ii) $(-17) - \dots = -4$

(iii) $(-9) - \dots = 3$

(iv) $-15 - 27 = \dots$

(v) $15 - 27 = \dots$

(vi) $7 + \dots = 0$

(vii) $(-9) + \dots = 0$

(viii) $17 + (-17) = \dots$

(ix) $(-7) + \dots = -5$