## ST. LAWRENCE HIGH SCHOOL

## TOPIC - Distance Formula

## Subject : Mathematics

WORKSHEET NO. - 6

Class-9
First term
F. M. 15

Date: 01.02.2021
Q.1) Choose the correct option:
(1x15=15)
i) If the two ends of the diameter of a circle are ( $2,-5$ ) and ( $-4,3$ ), then the radius of the circle is
a) 8 units
b) 10 units
c) 4 units
d) 5 units
ii) The triangle produced by joining the points $(2,-3),(-6,-7)$, and $(-8,-3)$ is
a) isosceles
b) equilateral
c) scalene
d) right angled
iii) If the distance between the points $(a, 0)$ and $(0, a)$ is $4 \sqrt{2}$ then the value of $a$ is
a) 2
b) 4
c) 8
d) $2 \sqrt{2}$
iv) If the points $(2,3)$ and $(-1,2)$ are equidistance from the point $(x, y)$ then
a) $2 x+3 y=4$
b) $3 x+y=4$
c) $4 x+3 y=5$
d) $x+3 y=4$
v) If the distance of the points $(p, 5)$ and $(6, q)$ from origin be equal, then
a) $p^{2}+q^{2}=61$
b) $p^{2}-q^{2}=11$
c) $p^{2}+q^{2}=11$
d) $p+q=11$
vi) If the distance of the $\operatorname{point}(8,8)$ from the $\operatorname{point}(0, k)$ be 10 units, then the value of $k$ is
a) 14 and 2
b) -14 and 2
c) 14 and - 2
d)- 14 and - 2
vii) The co ordinates of a point which is equidistant from the points $(1,0)$ and $(-1,4)$ is
a) $(-4,4)$
b) $(4,-4)$
c) $(4,4)$
d) ( $-4,-4$ )
viii ) The triangle formed by the points $(3,3),(8,-2)$ and $(-2,-2)$ is
a) equilateral
b) isosceles
c) scalene
d) right angled
ix) The triangle formed by the points $(5,0),(-5,0)$ and $(0,5)$ is
a) equilateral
b) isosceles
c) scalene
d) right angled
x) A point is on $y$ axis whose ordinate is 5 and another point is $(-3,1)$. The distance between them is
a) 5 units
b) 3 units
c) 6 units
d) 2 units
xi) $A$ is a point on $y$ axis whose ordinate is 4 and $B$ is a point on $x$ axis whose abscissa is -3 . The length of the $A B$ is
a) 4 units
b) 2 units
c) 3 units
d) 5 units
xii) If the points $(0,0),(3,2)$ and $(k, 4)$ are collinear, then the value of $k$ is
a) 7
b) 6
c) 5
d) -6
xiii) If the point $(k, 0)$ is equidistant from the points $(7,6)$ and $(-3,4)$, then the value of $k$ is
a) 8
b) 6
c) 3
d) 5
xiv) $A(5,0)$ is a point on $x$ axis, $B(0,12)$ is a point on $y$ axis. If the length of $A B$ is 13 units, then the area of $\triangle O A B$ is
a) 40 sq.units
b) 30 sq.units
c) 20 sq.units
d) 10 sq.units
$x v)$ The co ordinates of $P, Q, R$, and $S$ are $(0,3),(3,3),(3,0)$ and $(0,0)$. Joining these four points the diagram PQRS is
a) Parallelogram
b)rhombus
c) rectangle
d) square

