## ST. LAWRENCE HIGH SCHOOL

## TOPIC - Distance Formula

Subject : Mathematics
Class-9
First term
F. M. 15
WORKSHEET NO. - 6
Solutions
Date: 01.02.2021

## Q.1) Choose the correct option:

i) If the two ends of the diameter of a circle are ( $2,-5$ ) and ( $-4,3$ ), then the radius of the circle is
d) 5 units
ii) The triangle produced by joining the points $(2,-3),(-6,-7)$, and $(-8,-3)$ is
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
b) 4
iv) If the points $(2,3)$ and $(-1,2)$ are equidistance from the point $(x, y)$ then
b) $3 x+y=4$
v) If the distance of the points $(p, 5)$ and $(6, q)$ from origin be equal, then
b) $p^{2}-q^{2}=11$
vi) If the distance of the point $(8,8)$ from the point $(0, k)$ be 10 units, then the value of $k$ is
a) 14 and 2
vii) The co ordinates of a point which is equidistant from the points(1,0) and ( $-1,4$ ) is
c) $(4,4)$
viii ) The triangle formed by the points $(3,3),(8,-2)$ and $(-2,-2)$ is
a) equilateral
ix) The triangle formed by the points $(5,0),(-5,0)$ and $(0,5)$ is
a) equilateral
$x$ ) A point is on $y$ axis whose ordinate is 5 and another point is $(-3,1)$. The distance between them is
a) 5 units
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 d) 5 units
xii) If the points $(0,0),(3,2)$ and $(k, 4)$ are collinear, then the value of $k$ is
b) 6
xiii) If the point $(k, 0)$ is equidistant from the points $(7,6)$ and $(-3,4)$, then the value of $k$ is c) 3
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 b) 30 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 d) square

