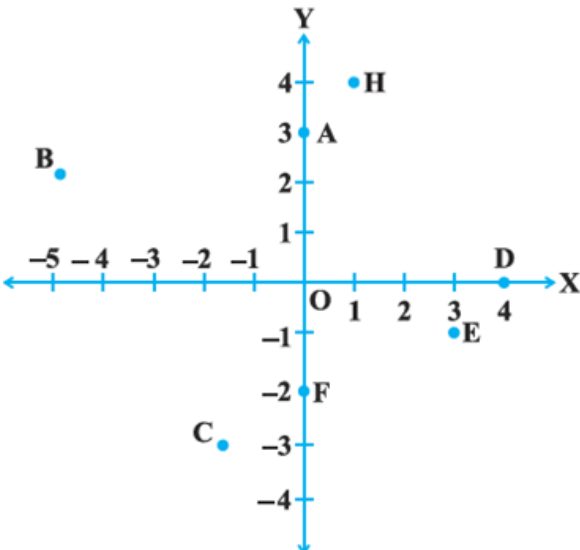


INDIAN SCHOOL AL WADI AL KABIR
Class IX, Mathematics *Revision worksheet –Mid Term*
13-09-2020

Q.1.	Which point lies on x-axis?							
	A	(3, 2)	B	(-3, 2)	C	(2, 0)	D	(-1,- 2)
Q.2.	Which one of the following is a rational number?							
	A	$\sqrt{6}$	B	$\sqrt{4}$	C	$\sqrt{7}$	D	$\sqrt{5}$
Q.3.	On rationalising the denominator of $\frac{1}{\sqrt{5}}$, we get							
	A	5	B	$\frac{\sqrt{5}}{5}$	C	$\frac{-\sqrt{5}}{5}$	D	$\sqrt{5}$
Q.4.	The exponential form of $\sqrt[3]{7}$ is							
	A	7^3	B	3^7	C	$3^{\frac{1}{7}}$	D	$7^{\frac{1}{3}}$
Q.5.	If the perimeter of an equilateral triangle is 180 cm. Then its area will be:							
	A	900 cm^2	B	$900\sqrt{3} \text{ cm}^2$	C	$600\sqrt{3} \text{ cm}^2$	D	$300\sqrt{3} \text{ cm}^2$
Q.6.	Which point lies in IV quadrant?							
	A	(-3,-4)	B	(3,-4)	C	(3,4)	D	(0,4)
Q.7.	The value of $16^{\frac{3}{2}}$ is							
	A	16	B	64	C	-16	D	$\frac{1}{32}$
Q.8.	Represent $0.\overline{234}$ in the form $\frac{p}{q}$ where p and q are integers, $q \neq 0$.							$\frac{26}{111}$
Q.9.	Simplify $2\sqrt{48} - 3\sqrt{75} + 4\sqrt{27}$							$5\sqrt{3}$
Q.10.	If $x = 6 - \sqrt{35}$, find $x^2 + \frac{1}{x^2}$.							142

Q.11.	Prove that $\frac{1}{\sqrt{4+\sqrt{5}}} + \frac{1}{\sqrt{5+\sqrt{6}}} + \frac{1}{\sqrt{6+\sqrt{7}}} + \frac{1}{\sqrt{7+\sqrt{8}}} + \frac{1}{\sqrt{8+\sqrt{9}}} = 1$.	
Q.12.	Represent $\sqrt{5}$ on number line.	
Q.13	Represent $\sqrt{6.3}$ geometrically on a number line.	
Q.14	Find x, if $\left(\frac{2}{3}\right)^x \cdot \left(\frac{3}{2}\right)^{2x} = \frac{81}{16}$.	4
Q.15	Simplify: $\frac{1}{3-\sqrt{8}} - \frac{1}{\sqrt{8}-\sqrt{7}} + \frac{1}{\sqrt{7}-\sqrt{6}} - \frac{1}{\sqrt{6}-\sqrt{5}} + \frac{1}{\sqrt{5}-2}$.	5
Q.16	<p>From the figure write the following:</p> <p>i) The coordinates of B and H and O.</p> <p>ii) Abscissa of the point A.</p> <p>iii) The point identified by the coordinates (4, 0).</p> <p>iv) The ordinate of the point C</p>	 <p>(-5,2) (1,4) (0,0) O D -3</p>
Q.17.	In which quadrant or on which axis do each of the points (2, 3), (2,-3), (-2, 3), (0,3), (2,0) and (-2,-3) lie?	I,IV,II ,yaxis ,xaxis ,IV
Q.18.	Find the area of an isosceles triangle whose one side is 10cm greater than each of its equal sides and perimeter is 100cm.	200 $\sqrt{5}$ cm ²
Q.19	Find the area of an equilateral triangle with side 16cm	64 $\sqrt{3}$ cm ²
Q.20.	Find a and b, if $\frac{2\sqrt{5}+\sqrt{3}}{2\sqrt{5}-\sqrt{3}} + \frac{2\sqrt{5}-\sqrt{3}}{2\sqrt{5}+\sqrt{3}} = a + \sqrt{15} b$.	a = $\frac{46}{17}$ and b=0
Q.21.	Represent $\sqrt{2}$ on a number line.	
