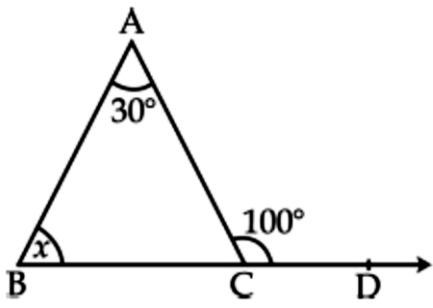
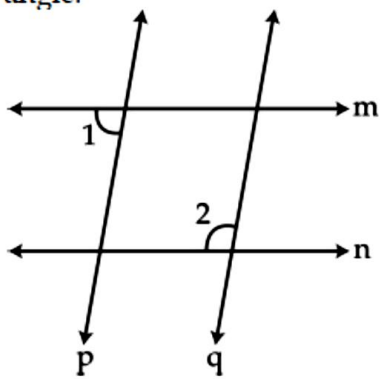


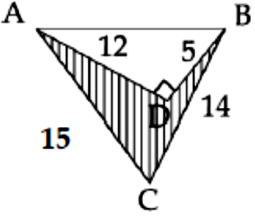
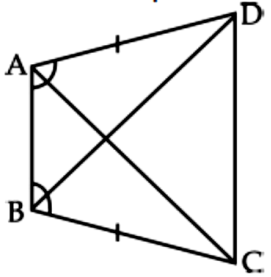
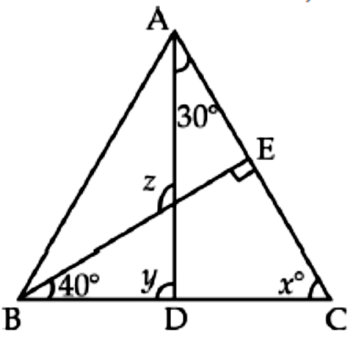


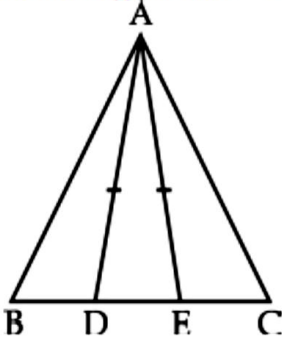
INDIAN SCHOOL AL WADI AL KABIR

Class: IX	Department: MATHEMATICS	Date: 27-01-2020
	Topic: Revision – Set 1	

	Questions	Answers
1.	Abscissa of all the points on y -axis is : (A) 1 (B) any number (C) 0 (D) -1	C
2.	The angle which is half its supplement is : (A) 60° (B) 120° (C) 110° (D) 130°	A
3.	The rationalising factor of $\frac{1}{\sqrt{50}}$ is : (A) $5\sqrt{2}$ (B) $\sqrt{2}$ (C) 50 (D) $\sqrt{5}$	B
4.	Degree of the polynomial $2x^3 + x^2 - 2x + 3^4$ is : (A) 1 (B) 3 (C) 2 (D) 4	B
5.	The Perpendicular distance of the point P (3, 4) from the x -axis is : (A) 3 units (B) 1 unit (C) 7 units (D) 4 units	D
6.	If $x^{31} + 31$ is divided by $(x + 1)$, then the remainder is : (A) 0 (B) 1 (C) 30 (D) 31	C
7.	In ΔABC if $\angle A = 35^\circ$ and $\angle B = 75^\circ$, then the longest side of the triangle is : (A) AC (B) AB (C) BC (D) AB – BC	A
8.	If $x + y = 9$ and $xy = 20$, value of $x^2 + y^2$ is : (A) 24 (B) 41 (C) 81 (D) 141	B
9.	If the 3 altitudes of a triangle are equal, then triangle is : (A) right angled triangle (B) Isosceles triangle (C) acute angled triangle (D) Equilateral triangle	D

10.	Mirror image of the point $(9, -8)$ on the y -axis is : (A) $(-9, 8)$ (B) $(9, 8)$ (C) $(-9, -8)$ (D) $(-8, 9)$	C
11.	Factorise : $125x^3 + y^3$. Ans: $(x + y)(x^2 - xy + y^2)$	
12.	In the figure, find the value of x : 	70°
13.	If $z = 0.064$, then find the value of $\left(\frac{1}{z}\right)^{\frac{1}{3}}$.	$\frac{5}{2}$
14.	Find the value of a , if $(x - 1)$ is a factor of $2x^2 + ax + \sqrt{2}$. Ans: $-(2 + \sqrt{2})$	
15.	If $a = 1 + \sqrt{7}$, find the value of $\frac{-6}{a}$	$1 - \sqrt{7}$
16.	Using a suitable identity, evaluate $(42)^3 - (18)^3 - (24)^3$.	54432
17.	Express $0.15\overline{9}$ in $\frac{p}{q}$ form, where p and q are integers and $q \neq 0$.	$\frac{4}{25}$
18.	In the given figure $m \parallel n$ and $p \parallel q$. If $\angle 1 = 75^\circ$, then Prove that $\angle 2 = \angle 1 + \frac{1}{3}$ of right angle. 	
19.	Find the area of a triangle whose sides are 11m, 60 m and 61 m.	330 sq.m

20.	If $x = 3 + 2\sqrt{2}$ then find the value of $\left(x - \frac{1}{x}\right)^3$	$128\sqrt{2}$
21.	 Find the area of the shaded region in the given figure : (All measurements are in cm.)	54 cm^2
22.	Simplify $\frac{1}{1 + \sqrt{2}} + \frac{1}{\sqrt{2} + \sqrt{3}} + \frac{2}{\sqrt{3} + \sqrt{5}}$	$\sqrt{5} - 1$
23.	If $x + y + 4 = 0$, then find the value of $x^3 + y^3 - 12xy + 64$.	0
24.	Plot the points A(-3,-3), B(3,-3), C(3,3), D(-3,3). Also find length of line segment AB.	6 units
25.	ABCD is a quadrilateral in which $AD = BC$ and $\angle DAB = \angle CBA$. Prove that $BD = AC$. 	
26.	Find the values of a and b if $\frac{2\sqrt{6} - \sqrt{5}}{3\sqrt{5} - 2\sqrt{6}} = a + b\sqrt{30}$	$\frac{3}{7}, \frac{4}{21}$
27.	In the $\triangle ABC$, $BE \perp AC$, $\angle EBC = 40^\circ$ and $\angle DAC = 30^\circ$. Find the values of x, y, z. 	50° , 80° , 120°
28.	Simplify $\left(\frac{81}{16}\right)^{-\frac{3}{4}} \times \left[\left(\frac{25}{9}\right)^{-\frac{3}{2}} \div \left(\frac{5}{2}\right)^{-3} \right]$	1
29.	Find the product $(5a - 3b)(25a^2 + 15ab + 9b^2)$. Ans: $125a^3 - 27b^3$	

30.	In the figure $AD = AE$, $BD = EC$. Prove that $\triangle ABC$ is an isosceles triangle. 	
31.	The perimeter of a rhombus is 52 cm. One of the diagonals is 24 cm, find the area of the rhombus.	120 cm^2
32.	Factorise $y^3 - 2y^2 - 29y - 42$. Ans: $(y + 2)(y + 3)(y - 7)$	
33.	Polynomials $kx^3 + 3x^2 - 3$ and $2x^3 - 5x + k$, when divided by $(x - 4)$ leave the same remainder in each case. Find the value of k.	1
34.	See figure and write the following : (i) Co-ordinates of point P. (ii) Abscissa of point Q. (iii) The point identified by the co-ordinates $(-4, 5)$ (iv) The point identified by the co-ordinates $(-3, -6)$ 