



INDIAN SCHOOL AL WADI AL KABIR
Class IX, Mathematics Worksheet- NUMBER SYSTEM
25-04-2021

OBJECTIVE TYPE (1 Mark)

Q.1.	A real number which is non-terminating and non-recurring decimal expansion.							
	A	0.125	B	0.121221222...	C	0.454545.....	D	2.478478
Q.2.	Which of the following expresses $0.15\overline{6}$ in the form $\frac{p}{q}$, where p and q are integers and $q \neq 0$.							
	A	$\frac{47}{400}$	B	$\frac{47}{100}$	C	$\frac{46}{300}$	D	$\frac{47}{300}$
Q.3.	The equivalent of $\sqrt{12} \times \sqrt{8}$							
	A	$4\sqrt{6}$	B	$2\sqrt{6}$	C	$4\sqrt{5}$	D	$3\sqrt{6}$
Q.4.	If $d > 0$ and $d^2 = c$, then find the value of \sqrt{c}							
	A	d^2c	B	d^2	C	d	D	d^4
Q.5.	The value of $\sqrt[4]{625^{-2}}$ is							
	A	$\frac{1}{25}$	B	$\frac{1}{50}$	C	50	D	25
Q.6.	If $x = 5$ and $y = 2$, then the value of $(x^y + y^x)^{-1}$							
	A	29	B	$\frac{1}{29}$	C	57	D	$\frac{1}{57}$
Q.7.	Simplify $\frac{6 - 4\sqrt{3}}{6 + 4\sqrt{3}}$ by rationalizing the denominator.							
	A	$4\sqrt{3} - 7$	B	$4\sqrt{3} + 7$	C	$7\sqrt{3} - 4$	D	$7\sqrt{3} + 4$
Q.8.	Taking $\sqrt{2} = 1.414$ and $\pi = 3.141$, evaluate $\frac{1}{\sqrt{2}} + \pi$							
	A	4.848	B	4.555	C	3.848	D	3.555
Q.9.	Find a and b if $\frac{1 - \sqrt{3}}{1 + \sqrt{3}} = a + b\sqrt{3}$							
	A	$a = 2, b = -1$	B	$a = -1, b = 2$	C	$a = 1, b = -2$	D	$a = -2, b = 1$

Q.10.	The value of $\sqrt{63} + \sqrt{112} + \sqrt{147}$ is							
	A	$7\sqrt{7} + 7\sqrt{3}$	B	$4\sqrt{7} + 7\sqrt{3}$	C	$7\sqrt{7} + 4\sqrt{3}$	D	$4\sqrt{7} + 4\sqrt{3}$
Q.11.	The rationalizing factor of $\frac{5\sqrt{3} - 9\sqrt{2}}{5\sqrt{3} + 9\sqrt{2}}$ is							
	A	$5\sqrt{3} + 9\sqrt{2}$	B	$9\sqrt{2} + 5\sqrt{3}$	C	$5\sqrt{3} - 9\sqrt{2}$	D	$9\sqrt{2} - 5\sqrt{3}$
Q.12.	Addition of two irrational number is							
	A	Rational	B	Irrational	C	Integers	D	Both (A) and (B)
Q.13.	The value of $(\sqrt{2} + \sqrt{3})(\sqrt{2} - \sqrt{3})$ is							
	A	5	B	-1	C	-5	D	1
Q.14.	The simplified form of $\left(-\frac{1}{27}\right)^{-\frac{2}{3}}$ is							
	A	9	B	27	C	$\frac{1}{27}$	D	$\frac{1}{9}$
Q.15.	If a, b, c are positive real numbers, then $\sqrt[5]{3125a^{10}b^5c^{10}}$ is equal to							
	A	$5a^2bc^2$	B	$25a^2bc^2$	C	$125a^2bc^2$	D	$5a^2c^2$

Answers

Answers	1	0.121221222...	2	$\frac{47}{300}$	3	$4\sqrt{6}$	4	d
	5	$\frac{1}{25}$	6	$\frac{1}{57}$	7	$4\sqrt{3} - 7$	8	3.848
	9	a = -2, b = 1	10	$7\sqrt{7} + 7\sqrt{3}$	11	$5\sqrt{3} - 9\sqrt{2}$	12	Both (A) and (B)
	13	-1	14	9	15	$5a^2bc^2$		