



INDIAN SCHOOL AL WADI AL KABIR

Class VIII, Mathematics

EXPONENTS & POWERS WORKSHEET- (MCQ)

Multiple Choice questions

Q.1.	The value of $\left(\frac{1}{2}\right)^{-2} + \left(\frac{1}{3}\right)^{-1} + \left(\frac{1}{5}\right)^{-2}$							
A	10	B	32	C	17	D	22	
Q.2.	$(2^0 \times 5^0 \times 3^0) + 7^0$							
A	4	B	0	C	1	D	2	
Q.3.	The multiplicative inverse of 5^{-4}							
A	-5^4	B	$\left(\frac{1}{5}\right)^4$	C	625	D	-625	
Q.4.	The value of k such that $9^{2k-1} \div 9^4 = 9^7$							
A	6	B	1	C	2	D	4	
Q.5.	$\frac{7^{-1} \times 3^{-2}}{7^{-3} \times 3^{-3}}$ can be simplified as							
A	$\frac{1}{49}$	B	147	C	$\frac{1}{147}$	D	-147	
Q.6.	The standard form of 0.0000856 is							
A	0.856×10^{-5}	B	0.856×10^{-4}	C	8.56×10^{-5}	D	8.56×10^5	
Q.7.	The value of $(5^{-1} - 6^{-1})^{-1} - (2^{-1} - 3^{-1})^{-1}$							
A	$\frac{-1}{24}$	B	-24	C	$\frac{1}{24}$	D	24	
Q8.	Simplify : $\{2^5 \times 2^7\} \div \{2^3 \times 2^{-2}\}$							
A	2^{11}	B	2^7	C	2^{17}	D	2^{12}	
Q9	$1 \times 10^5 + 8 \times 10^4 + 7 \times 10^2 + 3 \times 10^1 + 8 \times 10^0 + 5 \times 10^{-3}$ is equal to							

	A	18738.05	B	18738.005	C	180738.005	D	180738.5
Q10	$(\frac{2}{3})^5 \times (\frac{3}{5})^5$ is equal to							
	A	$(\frac{2}{3} \times \frac{3}{5})^5$	B	$(\frac{2}{3} \times \frac{3}{5})^0$	C	$(\frac{2}{3} \times \frac{3}{5})^1$	D	$(\frac{2}{3} \times \frac{3}{5})^{10}$

FILL IN THE BLANKS

Q11	The value of m if $81230000 = 8.123 \times 10^m$ -----
Q12	The multiplicative inverse of $(6^{-2} \times 6^{-1})$ is -----
Q13	The value of 4^{-3} is -----
Q14	The usual form of 6.7523×10^8 is-----
Q15	The value of $\frac{3^{-3}}{3^{-5}} \times 2^2$ -----

CASE STUDY: The Indian – American population of six states of USA is given. Based on the information answer the following questions



State	Indian-American population
California	8,16,536
Texas	4,83,245
New Jersey	3,84,988
New York	3,72,908
Illinois	2,42,823
Florida	1,77,845

Q 16	The population in New jersey in standard form							
	A	3.48988×10^5	B	34.8988×10^5	C	3.84988×10^5	D	3.4988×10^5
Q 17	The difference in population in New York and Florida is							
	A	1.30085×10^5	B	1.95063×10^5	C	1.42165×10^5	D	9.8257×10^5

Q 18	Which city's population is nearest to 5×10^5							
	A	New Jersey	B	New York	C	California	D	Texas
Q 19	If $816536 = P \times 10^4$, the value of P is							
	A	81.6536	B	8.16536	C	8165360	D	816.536
Q 20	If the areas of New Jersey , California and Texas are 22591 km^2 , 423970 km^2 and 695662 km^2 respectively . Which state has least Indian -American population density (Population density = $\frac{\text{population}}{\text{area}}$)							
	A	New jersey	B	California	C	Texas	D	All are same

ANSWERS

1.	B)32	2.	D) 2	3.	C) 625	4.	A) 6
5.	B) 147	6.	C) 8.56×10^{-5}	7.	D) 24	8.	A) 2^{11}
9.	C) 180738.005	10.	A) $\left(\frac{2}{3} \times \frac{3}{5}\right)^5$	11.	$m = 7$	12.	6^3
13.	$\frac{1}{64}$	14.	675230000	15.	36	16.	C) 3.84988×10^5
17.	B) 1.95063×10^5	18.	D) Texas	19.	A) 81.6536	20.	C) Texas