

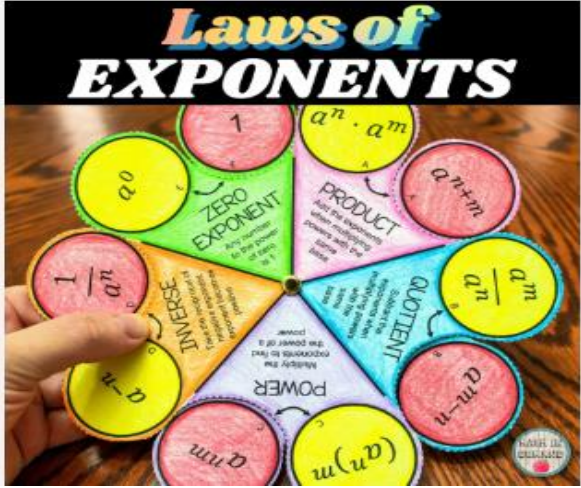
INDIAN SCHOOL AL WADI AL KABIR (2023-24)

Class VII, Mathematics

WORKSHEET (OTQ) – EXPONENTS AND POWERS

Multiple Choice Questions

Q.1.	Simplify form of $(5^3 \div 5^2) \times 5^3$ is:						
A	5^{10}	B	5^5	C	125	D	625
Q.2.	The numeral for which $7 \times 10^5 + 6 \times 10^4 + 4 \times 10^2 + 5 \times 10^1$ is:						
A	706045	B	760450	C	7060540	D	76045
Q.3.	The value of $(2^0 \times 3^0 + 3^0 \times 4^0) \times 7^0$ is:						
A	2	B	3	C	1	D	7
Q.4.	Exponential form of 108×192 is:						
A	$2^3 \times 3^7$	B	$2^4 \times 3^8$	C	$2^8 \times 3^4$	D	$7^4 \times 3^8$
Q.5.	If $1247800 = 1.247 \times 10^m$, the value of m is:						
A	7	B	10	C	6	D	5
Q.6.	Exponential form of $7 \times 7 \times 7 \times m \times m \times m$ is:						
A	$7m^3$	B	$(7m)^3$	C	7^3m	D	$49m^2$
Q.7.	The value of $(11^3)^4 \div 11^{10}$ is:						
A	121	B	11	C	33	D	22
Q.8.	Exponential form of 324×72 is:						
A	$3^5 \times 2^6$	B	$2^5 \times 3^6$	C	$4^5 \times 3^6$	D	$2^5 \times 9^5$
Q.9.	The standard form of 189600000 is:						
A	18.96×10^8	B	1896×10^5	C	1.896×10^8	D	0.1896×10^8
Q.10	The value of $(-1)^{25} \times (-1)^{32} \times (-1)^{55}$ is:						
A	(-1)	B	1	C	(-3)	D	-112

	Source-Based Questions: Ammu and Amalu were playing bingo during their leisure time. They were asking questions about numbers in exponential form.							
Q.11	Express 128×250 as powers of prime numbers:							
	A	$2^8 \times 5^3$	B	$3^5 \times 5^3$	C	$4^5 \times 5^3$	D	$3^2 \times 25^3$
Q.12	Exponential form of $11 \times 11 \times 11 \times p \times p \times p \times p$ is:							
	A	$11^3 \times p^5$	B	$11^3 \times p^6$	C	$11^2 \times p^4$	D	$11^3 \times p^4$
Q.13	The value of $[(7^2)^3 \times 7^5] \div 7^9$ is:							
	A	7	B	49	C	94	D	70
Q.14	Standard form of 945.0382×10^5 is:							
	A	9.450382×10^7	B	94.0382×10^7	C	94.50382×10^5	D	9.450382×10^5
Q.15	The value of $[(3^2)^0 \times 5^0 \times 7^0] + [18^0 \div 11^0]$ is:							
	A	5	B	0	C	2	D	1
	<p>CASE STUDY: -To judge the knowledge of students on topic "Number System" the teacher asked the students about the laws of exponents they have studied in previous classes. Further he wrote the laws of exponents on blackboard and asked students to answer the following questions using these laws.</p>							
Q.16	Simplify : $\frac{2^3 \times 3^5 \times 4}{3^3 \times 16}$							
Q.17	Find the value of x if $2^x = 128$							
Q.18	Write the expanded form of 59618 by using exponents.							
Q.19	Find the value of $[(10^3)^5 \times 10^7] \div [10^{11} \times 10^6 \times 10^3]$							
Q.20	Find the decimal number which is written as 6.3845×10^7 in standard form.							

ANSWERS

1.	D	2.	B	3.	A	4.	C
5.	C	6.	B	7.	A	8.	B
9.	C	10.	B	11.	A	12.	D
13.	B	14.	A	15.	C	16.	18
17.	7	18.	Do as directed	19.	100	20.	63845000