

Exponents and Powers Class 8 MCQs Questions

Question 1. $a^m \times a^n$ is equal to

(a) a^{m+n}

(b) a^{m-n}

(c) a^{mn}

(d) a^{n-m}

Question 2. $a^m \div a^n$ is equal to

(a) a^{m-n}

(b) a^{m+n}

(c) a^{mn}

(d) a^{n-m}

Question 3. $(a^m)^n$ is equal to

(a) a^{m+n}

(b) a^{m-n}

(c) a^{mn}

(d) a^{n-m}

Question 4. $a^m \times b^m$ is equal to

(a) $(ab)^m$

(b) $(ab)^{-m}$

(c) $a^m b$

(d) ab^m

Question 5. a^0 is equal to

(a) 0

(b) 1

(c) -1

(d) a.

Question 6. $a^m b^m$ is equal to

- (a) $(ab)^m$
- (b) $(ba)^m$
- (c) $(amb)^m$
- (d) $(abm)^m$

Question 7. $2 \times 2 \times 2 \times 2 \times 2$ is equal to

- (a) 2^4
- (b) 2^3
- (c) 2^2
- (d) 2^5

Question 8. In 10^2 , the exponent is

- (a) 1
- (b) 2
- (c) 10
- (d) 1.

Question 9. In 10^2 the base is

- (a) 1
- (b) 0
- (c) 10
- (d) 100.

Question 10. 10^{-1} is equal to

- (a) 10
- (b) -1
- (c) $1/10$
- (d) $-1/10$

Question 11. The multiplicative inverse of 2^{-3} is

- (a) 2
- (b) 3
- (c) 3
- (d) 2^3

Question 12. The multiplicative inverse of 10^5 is

- (a) 5
- (b) 10
- (c) 10^{-5}
- (d) 10^5 .

Question 13. The multiplicative inverse of 2^{-2} is

- (a) 2^5
- (b) 2^2
- (c) 2
- (d) 1.

Question 14. The multiplicative inverse of 10^{10} is

- (a) 10
- (b) 110
- (c) 10^{-10}
- (d) 10^{10} .

Question 15. The multiplicative inverse of a^m is

- (a) a
- (b) m
- (c) a^m
- (d) a^{-m}

Question 16. $5^3 \times 5^{-1}$ is equal to

- (a) 5
- (b) 5^3
- (c) 5^{-1}
- (d) 5^2

Question 17. $(-2)^{-5} \times (-2)^6$ is equal to

- (a) 2
- (b) -2
- (c) -5
- (d) 6.

Question 18. $3^2 \times 3^{-4} \times 3^5$ is equal to

- (a) 3
- (b) 3^2
- (c) 3^3
- (d) 3^5

Question 19. $(-2)^{-2}$ is equal to

- (a) $1/4$
- (b) $1/2$
- (c) $-1/2$
- (d) $-1/4$

Question 20. $(1/2)^{-4}$ is equal to

- (a) 2
- (b) 2^{-4}
- (c) 1
- (d) 2^{-4}

Question 21. $(2^0 + 4^{-1}) \times 2^2$ is equal to

- (a) 2
- (b) 3
- (c) 4
- (d) 5

Question 22. $(2^{-1} + 3^{-1} + 5^{-1})^0$ is equal to

- (a) 2
- (b) 3
- (c) 5
- (d) 1.

Question 23. $3^m + 3^3 = 3^5 \Rightarrow m$ is equal to

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

Question 24. $(-2)^{m+1} \times (-2)^4 = (-2)^6 \Rightarrow m =$

- (a) 0
- (b) 1
- (c) -1
- (d) none of these.

Question 25. $(-1)^{50}$ is equal to

- (a) -1
- (b) 1
- (c) 50
- (d) - 50.

Question 26. $(-1)^{51}$ is equal to

- (a) -1
- (b) 1
- (c) 51
- (d) -51.

Question 27. 149600000000 is equal to

- (a) 1.496×10^{11}
- (b) 1.496×10^{10}
- (c) 1.496×10^{12}
- (d) 1.496×10^8 .

Question 28. 3000000000 is equal to

- (a) 3×10^8
- (b) 3×10^7
- (c) 3×10^6
- (d) 3×10^9

Question 29. 0.000007 is equal to

- (a) 7×10^{-6}
- (b) 7×10^{-5}
- (c) 7×10^{-4}
- (d) 7×10^{-3}

Question 30. 384467000 is equal to

- (a) 3.84467×10^8
- (b) 3.84467×10^3
- (c) 3.84467×10^7
- (d) 3.84467×10^6

Question 31. 0.00001275 is equal to

- (a) 1.275×10^{-5}
- (b) 1.275×10^{-3}
- (c) 1.275×10^4
- (d) 1.275×10^3

Question 32. 695000 is equal to

- (a) 6.95×10^5
- (b) 6.95×10^3
- (c) 6.95×10^6
- (d) 6.95×10^4

Question 33. 503600 is equal to

- (a) 5.036×10^5
- (b) 5.036×10^6
- (c) 5.036×10^4
- (d) 5.036×10^7

Question 34. 0.0016 is equal to

- (a) 1.6×10^{-3}
- (b) 1.6×10^{-2}
- (c) 1.6×10^{-4}
- (d) 1.6×10^{-5}

Question 35. 0.000003 is equal to

- (a) 3×10^{-6}
- (b) 3×10^6
- (c) 3×10^5
- (d) 3×10^{-5}

Question 36. 8848 is equal to

- (a) 8.848×10^3
- (b) 8.848×10^2
- (c) 8.848×10
- (d) 8.848×10^4

Question 37. 1.5×10^{11} is equal to

- (a) 1500000000000
- (b) 150000000000
- (c) 15000000000
- (d) 15000000000000.

Question 38. 2.1×10^{-6} is equal to

- (a) 0.0000021
- (b) 0.000021
- (c) 0.00021
- (d) 0.0021.

Question 39. 2.5×10^4 is equal to

- (a) 25
- (b) 250000
- (c) 2500
- (d) 25000.

Question 40. 0.07×10^{10} is equal to

- (a) 7000000000
- (b) 70000000
- (c) 7000
- (d) 7.

Question 41. The value of 2^{-2} is:

- (a) 4
- (b) $\frac{1}{4}$
- (c) 2
- (d) $\frac{1}{2}$

Question 42. The multiplicative inverse of 7^{-2} is:

- (a) 7^2
- (b) 7
- (c) $1/7^2$
- (d) $1/7$

Question 43. $2^2 \times 2^3 \times 2^4$ is equal to:

- (a) 2^{24}
- (b) 2^{-5}
- (c) 2^9
- (d) 2^{-9}

Question 44. $3^{-2} \times 3^{-5}$ is equal to:

- (a) 3^{-7}
- (b) 3^{-3}
- (c) 3^{-10}
- (d) 3^7

Question 45. $5^4/5^2$ is equal to:

- (a) 5^6
- (b) 5^{-6}
- (c) 5^{-2}
- (d) 5^2