

CHAPTER-2 | Power Play

QUIZ
PART-091. 2^{-4} is equal to:

- A. 2^4
B. $1/2^4$
C. -2^4
D. 8 (B)

Explanation: A negative exponent means reciprocal.2. 10^{-5} is equal to:

- A. 10^5
B. $1/10^5$
C. -10^5
D. 5 (C)

Explanation: $a^{-m} = 1/a^m$, where $a \neq 0$.3. -7^{-2} is equal to:

- A. $\frac{1}{49}$
B. -49
C. $-\frac{1}{49}$
D. 49 (A)

Explanation: $(-7)^{-2} = \frac{1}{(-7)^2} = \frac{1}{49}$.4. $(-5)^{-3}$ is equal to:

- A. $\frac{1}{125}$
B. $-\frac{1}{125}$
C. 125
D. -25 (B)

Explanation: $(-5)^3 = -125$, so reciprocal is $-\frac{1}{125}$.5. $2^{-4} \times 2^7$ is equal to:

- A. 2^3
B. 2^{-11}
C. 2^{11}
D. 2^{-3} (A)

Explanation: Same bases are multiplied by adding exponents: $-4+7=3$.6. $3^2 \times 3^{-5} \times 3^{-6}$ is equal to:

- A. 3^2
B. 3^3
C. 3^{-3}
D. 3^{13} (B)

Explanation: Add exponents: $2-5+6=3$.7. $p^3 \times p^{10}$ is equal to:

- A. p^7
B. p^{-7}
C. p^{13}
D. p^{13} (B)

Explanation: $3+(-10)=-7$.8. $8^p \times 8^q$ is equal to:

- A. 8^{p+q}
B. 8^{pq}
C. 8^{p-q}
D. 8^{q-p} (A)

Explanation: For same base multiplication, add the exponents.9. $3^7/3^9$ is equal to:

- A. 9
B. $1/9$
C. 27
D. $\frac{1}{27}$ (B)

Explanation: $3^{7-9} = 3^{-2} = \frac{1}{9}$.10. $\frac{15^5 \times 5^3 \times 3^3}{15^8}$ is equal to:

- A. 0
B. 1
C. 5
D. 3 (B)

Explanation: $5^3 \times 3^3 = 15^3$, so $\frac{15^5 \times 15^3}{15^8} = 1$.