

CHAPTER-2 | Power Play

QUIZ
PART-05

1. What is the main rule shown in this part?

- A. Add powers
- B. Subtract powers
- C. Multiply powers
- D. Divide powers (C)

Explanation: In power of a power, the powers are multiplied.

2. $(n^a)^b$ is equal to: is equal to:

- A. n^{a+b}
- B. n^{a-b}
- C. n^{ab}
- D. $n^{a/b}$ (C)

Explanation: When a power is raised to another power, multiply the exponents.

3. $(2^5)^2$ is equal to:

- A. 2^7
- B. 2^{10}
- C. 2^3
- D. 2^{25} (B)

Explanation: $5 \times 2 = 10$.

4. 2^{10} can be written as:

- A. $(2^5)^2$
- B. $(2^3)^2$
- C. $(2^4)^3$
- D. $(2^6)^2$ (A)

Explanation: $(2^5)^2 = 2^{10}$

5. $(7^4)^3$ is equal to:

- A. 7^7
- B. 7^{12}
- C. 7^{43}
- D. 7^1 (B)

Explanation: $4 \times 3 = 12$.

6. Which is a correct form of 8^6

- A. $(8^2)^3$
- B. $(8^4)^3$
- C. $(8^5)^2$
- D. $(8^6)^2$ (A)

Explanation: $(8^2)^3 = 8^6$

7. Which is a correct form 7^{15} ?

- A. $(7^5)^3$
- B. $(7^4)^3$
- C. $(7^6)^2$
- D. $(7^2)^5$ (A)

Explanation: $5 \times 3 = 15$.

8. Which is a correct form of 9^{14} ?

- A. $(9^7)^2$
- B. $(9^5)^3$
- C. $(9^4)^4$
- D. $(9^6)^3$ (A)

Explanation: $7 \times 2 = 14$.

9. Which is a correct form of 5^8

- A. $(5^3)^2$
- B. $(5^4)^2$
- C. $(5^5)^2$
- D. $(5^6)^2$ (C)

Explanation: $4 \times 2 = 8$.

10. Which statement is false?

- A. $(2^7)^2 = 2^{14}$
- B. $(p^5)^4 = p^{20}$
- C. $(q^6)^3 = q^{18}$
- D. $(r^7)^2 = r^9$ (B)

Explanation: $(r^7)^2 = r^{14}$, not r^9 .