1. What is n × n written as?
   A. n
   B. n^2
   C. 2n
   D. n^3 (B)

Explanation : n × n is written as n^2.

2. What is n × n × n written as?
   A. n^2
   B. 3n
   C. n^3
   D. n^4 (C)

Explanation: n multiplied by itself three times is n^3.

3. What is 5^4 equal to?
   A. 125
   B. 225
   C. 525
   D. 625 (D)

Explanation: $5^4 = 5 \times 5 \times 5 \times 5 = 625$.

4. In 5^4, what is 5 called?
   A. Base
   B. Power
   C. Product
   D. Sum (A)

Explanation: In 5^4, 5 is the base.

5. In 5^4, what is 4 called?
   A. Base
   B. Exponent
   C. Factor
   D. Root (B)

Explanation : In 5^4, 4 is the exponent or power.

6. What is a × a × a × b × b?
   A. a^2b^3
   B. a^3b^2
   C. a^3b^3
   D. a^2b^2 (B)

Explanation : a appears 3 times and b appears 2 times.

7. What is $(-3)^5$?
   A. 81
   B. 243
   C. −27
   D. −243 (D)

Explanation : An odd power of a negative number is negative.

8. What is $(-2)^4$?
   A. −16
   B. 16
   C. −8
   D. 8 (B)

Explanation : An even power of a negative number is positive.

9. What is 0^5?
   A. 0
   B. 1
   C. 5
   D. Undefined (A)

Explanation : Zero raised to any positive power is 0.

10. What is the prime factorization of 144 in exponential form?
    A. $2^2 \times 3^2$
    B. $2^3 \times 3^2$
    C. $2^4 \times 3^2$
    D. $2^4 \times 3^3$ (C)

Explanation : $144 = 16 \times 9 = 2^4 \times 3^2$.