

Lesson 8-3: Multiplication Properties of Exponents

Part 1: Multiplying

1. 010413a, P.I. A.A.12
The expression $8^{-4} \cdot 8^6$ is equivalent to
[A] 8^{-24} [B] 8^{10} [C] 8^2 [D] 8^{-2}
2. 060312a, P.I. A.A.12
The expression $3^2 \cdot 3^3 \cdot 3^4$ is equivalent to
[A] 27^{24} [B] 3^{24} [C] 3^9 [D] 27^9
3. 069911a, P.I. A.A.12
The expression $2^3 \cdot 4^2$ is equivalent to
[A] 2^{12} [B] 8^6 [C] 2^7 [D] 8^5
4. 010008a, P.I. A.A.12
The expression $(x^2z^3)(xy^2z)$ is equivalent to
[A] $x^2y^2z^3$ [B] $x^4y^2z^5$
[C] $x^3y^2z^4$ [D] $x^3y^3z^4$
5. 080001a, P.I. A.A.12
The product of $2x^3$ and $6x^5$ is
[A] $10x^{15}$ [B] $12x^{15}$
[C] $12x^8$ [D] $10x^8$
6. 010205a, P.I. A.A.12
The product of $3x^2y$ and $-4xy^3$ is
[A] $-12x^2y^3$ [B] $-12x^3y^4$
[C] $12x^2y^3$ [D] $12x^3y^4$
7. 010306a, P.I. A.A.12
The product of $3x^5$ and $2x^4$ is
[A] $6x^{20}$ [B] $6x^9$ [C] $5x^{20}$ [D] $5x^9$
8. 089906a, P.I. A.A.12
The product of $4x^2y$ and $2xy^3$ is
[A] $8x^2y^4$ [B] $8x^3y^4$
[C] $8x^2y^3$ [D] $8x^3y^3$
9. 080605a, P.I. A.A.12
What is the product of $10x^4y^2$ and $3xy^3$?
[A] $30x^5y^6$ [B] $30x^4y^6$
[C] $30x^5y^5$ [D] $30x^4y^5$
10. 060604a, P.I. A.A.12
What is the product of $\frac{1}{3}x^2y$ and $\frac{1}{6}xy^3$?
[A] $\frac{1}{9}x^3y^4$ [B] $\frac{1}{18}x^3y^4$
[C] $\frac{1}{18}x^2y^3$ [D] $\frac{1}{2}x^2y^3$

- [1] C
- [2] C
- [3] C
- [4] C
- [5] C
- [6] B
- [7] B
- [8] B
- [9] C
- [10] B