

NAME: _____

A.A.12: Multiply and divide monomial expressions with a common base, using the properties of exponents. Note: Use integral exponents only.

1. 060312a, P.I. A.A.12

The expression $3^2 \cdot 3^3 \cdot 3^4$ is equivalent to

[A] 3^{24} [B] 3^9 [C] 27^9 [D] 27^{24}

2. 080001a, P.I. A.A.12

The product of $2x^3$ and $6x^5$ is

[A] $12x^{15}$ [B] $10x^{15}$
[C] $12x^8$ [D] $10x^8$

3. 010205a, P.I. A.A.12

The product of $3x^2y$ and $-4xy^3$ is

[A] $-12x^2y^3$ [B] $12x^2y^3$
[C] $12x^3y^4$ [D] $-12x^3y^4$

4. 010306a, P.I. A.A.12

The product of $3x^5$ and $2x^4$ is

[A] $5x^9$ [B] $6x^9$ [C] $6x^{20}$ [D] $5x^{20}$

5. 080903ia, P.I. A.A.12

Which expression represents $(3x^2y^4)(4xy^2)$ in equivalent form?

[A] $12x^2y^8$ [B] $12x^3y^8$
[C] $12x^3y^6$ [D] $12x^2y^6$

6. 089906a, P.I. A.A.12

The product of $4x^2y$ and $2xy^3$ is

[A] $8x^2y^4$ [B] $8x^2y^3$
[C] $8x^3y^4$ [D] $8x^3y^3$

7. 080605a, P.I. A.A.12

What is the product of $10x^4y^2$ and $3xy^3$?

[A] $30x^5y^5$ [B] $30x^4y^5$
[C] $30x^5y^6$ [D] $30x^4y^6$

8. 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] $\frac{1}{2}x^2y^3$

9. 010910a, P.I. A.A.12

The expression $(-2a^2b^3)(4ab^5)(6a^3b^2)$ is equivalent to

[A] $-48a^5b^{10}$ [B] $8a^6b^{30}$
[C] $-48a^6b^{10}$ [D] $48a^5b^{10}$

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[1] B

[2] C

[3] D

[4] B

[5] C

[6] C

[7] A

[8] B

[9] C