NAME:_____

1. 080827ia, P.I. A.A.12

Which expression is equivalent to $(3x^2)^3$?

[A] $9x^5$ [B] $27x^6$ [C] $9x^6$ [D] $27x^5$

2. 010728a, P.I. A.A.12

The expression $(6x^3y^6)^2$ is equivalent to

[A] $6x^6y^{12}$ [B] $36x^6y^{12}$

[C] $36x^5y^8$ [D] $12x^6y^{12}$

3. 080824a, P.I. A.A.12

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

[A] $16a^5b^2$ [B] $8a^6b^2$

[C] $16a^6b^2$ [D] $-16a^6b^2$

4. 010506a, P.I. A.A.12

The product of $(5ab)$ and $(-2a^2b)^3$ is

[A] $-30a^6b^4$ [B] $-40a^6b^4$

[C] $-40a^7b^4$ [D] $-30a^7b^4$

5. 010529a

Expressed in its simplest form, $(3x^3)(2y)^2(4x^4)$ is equivalent to

[A] $48x^{12}y^2$ [B] $24x^{12}y^2$

[C] $24x^7y^2$ [D] $48x^7y^2$

6. 060518a, P.I. A.A.12

If $x \neq 0$, then $\frac{(x^2)^3}{x^5} \cdot 1000$ is equivalent to

[A] 0 [B] $1000x$

[C] $1000 + x$ [D] 1000

7. 080415b, P.I. A.A.12

The expression $\frac{(b^{2n+1})^3}{b^n \cdot b^{4n+3}}$ is equivalent to

[A] b^{-3n} [B] b^n [C] $\frac{b^n}{2}$ [D] b^{-3n+1}

8. 080811b

If $10^k = x$, then 10^{3k} is equal to

[A] $3x$ [B] x^3 [C] $3 + x$ [D] $1{,}000x$

[1] B

[2] B

[3] C

[4] C

[5] D

[6] B

[7] B

[8] B