

1. Simplify the product: $(4ab^4)^3(ab)^2$

[A] $4a^5b^{14}$

[B] $64a^5b^{14}$

[C] $64a^5b^6$

[D] $4a^4b^{14}$

2. Simplify the product: $(2pq^3)^2(pq)^5$

[A] $4p^7q^8$

[B] $4p^7q^{11}$

[C] $2p^7q^{11}$

[D] $2p^3q^{11}$

3. Simplify the product: $(3jk^6)^4(jk)^4$

[A] $81j^8k^{28}$

[B] $81j^8k^{10}$

[C] $3j^8k^{28}$

[D] $3j^5k^{28}$

4. Simplify the product: $(2yz^2)^2(yz)^6$

[A] $4y^8z^{10}$

[B] $2y^8z^{10}$

[C] $4y^8z^8$

[D] $2y^3z^{10}$

Simplify:

5. $(4b^6c^5d^2)^3$

6. $(3f^2g^6h^3)^4$

7. $(5e^5f^4g)^3$

8. $(4d^5e^6f^2)^2$

9. $(2v^4wx^3)^2$

10. $(5x^5y^2z^6)^3$

Algebra I Practice A.APR.A.1: Powers of Powers

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[1] B

[2] B

[3] A

[4] A

[5] $64b^{18}c^{15}d^6$

[6] $81f^8g^{24}h^{12}$

[7] $125e^{15}f^{12}g^3$

[8] $16d^{10}e^{12}f^4$

[9] $4v^8w^2x^6$

[10] $125x^{15}y^6z^{18}$