

ALL PROBLEMS CAN BE COMPLETED ON THIS WORKSHEET

WS 10A.1 - Multiplying Powers with Like Bases

#1-3, Simplify. Leave each product as a single base raised to an exponent.

1. $10^5 \cdot 10^3$

2. $n^{12} \cdot n^{30}$

3. $2^7 \cdot 2^4 \cdot 2^8 \cdot 2$

#4-11, Simplify.

4. $(2mn^{10})(6m^4n^{12})$

5. $(-4a^6b^7c^3)(-7a^{10}b^6c^5)$

6. $(3x^2z^4)(-8x^5y^3)$

7. $(5p^2)(-m^9p^{21})$

8. $(-rwy)(-rwy)(-rwy)(-rwy^2)$

9. $(5g^4j^6v^2)(-2g^8jv^9)(-j^{10}v^3)$

10. $(2x^ay^bz^c)(-y^wz^g)$

11. $(-a^bc^{2d}e^{3f})(-a^{3b}c^re)$