

Exponent Rules: Multiplying

Simplify. Your answer should contain only positive exponents.

1) $8n^5 \cdot 8n^2$

$64n^7$

2) $3b^3 \cdot 6b^6 \cdot b^7$

$18b^{16}$

3) $4r^3 \cdot r^7$

$4r^{10}$

4) $8a^2 \cdot 7a^5 \cdot 2a^7$

$112a^{14}$

5) $(4ab^3)^3$

$64a^3b^9$

6) $(2x)^2$

$4x^2$

7) $(2x^4y^3)^2$

$4x^8y^6$

8) $(2x^4)^4$

$16x^{16}$

9) $(2y^6 \cdot 2x^2y^2)^4$

$256y^{32}x^8$

10) $(-2y)^4 \cdot 2x^5y^4$

$32y^8x^5$

11) $(-2y^5)^2 \cdot 2yx^2$

$8y^{11}x^2$

12) $(2x^6y^2)^5 \cdot (-y^3)^4$

$32x^{30}y^{22}$