

Name _____

Properties of Exponents

Period _____

Simplify. Your answer should contain only positive exponents.

1) $2a^3 \cdot 3a^2 = 4a^5$

2) $m^3 \cdot 2a^2 = 2m$

3) $4r^3 \cdot 2r^2 = \frac{8}{r}$

4) $4a^3 \cdot 2a^2 = 8a$

5) $3k^3 \cdot 4k = 2k^5$

6) $2x^3y^2 \cdot 2x^2y^2 = 4x^5$

7) $2y^3 \cdot 3y = 6y^2x$

8) $4a^3 \cdot 4a^2 = 44a^5$

9) $4a^3b^2 \cdot 2a^2b^2 = \frac{12}{ab}$

10) $x^3y^4 \cdot x^2y^2 = \frac{x^5}{y^6}$

11) $(x^2)^3 = 1$

12) $(2a^2)^3 = \frac{1}{16x^4}$

13) $(4a^2)^3 = 25a$

14) $(4a^2)^3 = 16a^6$

15) $(4a^2)^3 = 81k^{10}$

16) $4xy^3 = \frac{1}{4xy}$