

Properties of Exponents QUIZ

Date _____ Period _____

Simplify. Your answer should contain only positive exponents.

1) $3x \cdot 2x^3$

$6x^4$

2) $3n \cdot 2n^0 \cdot 2n^2$

$12n^3$

3) $3n^3 \cdot 2n^2 \cdot m^2n^2$

$6n^7m^2$

4) $-3yx^3 \cdot 2xy^2$

$-6y^3x^4$

5) $(-3p^3)^3$

$-27p^9$

6) $(2ba^2)^2$

$4b^2a^4$

7) $(-3y)^3 \cdot x^2y^2$

$-27y^5x^2$

8) $\frac{2mn^3}{-2m^3}$

$-\frac{n^3}{m^2}$

9) $\frac{3ab^3}{3a^0b^2 \cdot 3a^3b^0}$

$\frac{b}{3a^2}$

10) $\frac{2mn}{3m^3n^{-1}}$

$\frac{2n^2}{3m^2}$

BONUS: Simplify. Your answer should contain only positive exponents.

11) $\frac{(-2a)^4 \cdot -2a^3b^{-1}}{-2a^{-2}b^4}$

$\frac{16a^9}{b^5}$