

NAME: _____

P.I. A.A.12: Divide monomial expressions with a common base, using the properties of exponents

Note: Use integral exponents only

Simplify:

1. $\frac{12x^7y^4}{-6x^2y^5}$

2. $\frac{-6x^6y^6}{-2x^4y^7}$

3. $\frac{-27x^7y^2}{-9x^6y^5}$

4. $\frac{-32x^6y^5}{-8x^5y^7}$

5. $\frac{42x^4y}{-7xy^5}$

6. $\frac{-25x^4y^3}{-5x^3y^5}$

7. Show two ways to use a calculator to find the value of $\frac{3^6}{3^2}$.

8. Write b^{12} as a quotient form $\frac{b^m}{b^n}$ in four different ways. Use only positive exponents.

[1] $-\frac{2x^5}{y}$

[2] $\frac{3x^2}{y}$

[3] $\frac{3x}{y^3}$

[4] $\frac{4x}{y^2}$

[5] $-\frac{6x^3}{y^4}$

[6] $\frac{5x}{y^2}$

[7] $3 \boxed{\wedge} 6 \boxed{\div} 3 \boxed{\wedge} 2 \text{ and } 3 \boxed{\wedge} (\boxed{6} \boxed{-} 2 \boxed{)}$

[8] Answers may vary. Sample: $\frac{b^{24}}{b^{12}}, \frac{b^{14}}{b^2}, \frac{b^{13}}{b}, \frac{b^{20}}{b^8}$
