Algebra 1 Bellwork Tuesday, March 15, 2016

1. Find each. Write answer in both Scientific Notation and Standard Notation.

a.
$$(2.8 \times 10^4)(3.75 \times 10^3)$$

b.
$$\frac{1.21 \times 10^4}{4.4 \times 10^9}$$

Simplify each. Make sure answers don't have exponents that are zero or negative.

$$2. \ \frac{-4c^{-3}d^2}{6k^{-1}m^0n^5}$$

3.
$$\left(\frac{5^{-2}x^7y^{-4}}{3w^5}\right)^{-1}$$

4.
$$-A^2B^{-8}C^2A^{-9}B^5CB^3$$

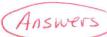
5.
$$(-2m^4n^{-3}p)(4^2m^5n^2p^6)$$

Evaluate each for A = -4 B = 6 C = 2Give fractional answers in reduced form (no decimals)

6.
$$A^{-2}BC^3$$

$$7. \quad \left(\frac{AB^{-2}}{C^{-2}}\right)^{-1}$$

Algebra 1 Bellwork Tuesday, March 15, 2016



1. Find each. Write answer in both Scientific Notation and Standard Notation.

a.
$$(2.8 \times 10^4)(3.75 \times 10^3)$$

 $105_1000_1000 = 1.05 \times 10^8$

b.
$$\frac{1.21 \times 10^4}{4.4 \times 10^9}$$
 $2.75 \times 10^{-6} = .00000275$

Simplify each. Make sure answers don't have exponents that are zero or negative.

2.
$$\frac{-4c^{-3}d^{2}}{6k^{-1}m^{0}n^{5}} = \frac{-4d^{2}k}{6c^{3}n^{5}}$$
$$= \frac{-2d^{2}k}{3c^{3}n^{5}}$$

3.
$$\left(\frac{5^{-2}x^{7}y^{-4}}{3w^{5}}\right)^{-1} = \left(\frac{x^{7}}{5^{2}, 3w^{5}y^{4}}\right)^{-1} = \left(\frac{x^{7}}{75w^{5}y^{4}}\right)^{-1} = \left(\frac{x^{7}}{75w^{5}y^{4}}\right)^{-1}$$

4.
$$-A^2B^{-8}C^2A^{-9}B^5CB^3$$

$$= \frac{C^3}{A^7}$$

5.
$$(-2m^4n^{-3}p)(4^2m^5n^2p^6)$$

 $-32m^9p^7$

Evaluate each for A=-4 B=6 C=2 Give fractional answers in reduced form (no decimals)

6.
$$A^{-2}BC^3$$

$$= \frac{BC^{3}}{A^{2}} = \frac{(6)(2)^{3}}{(-4)^{2}} = \frac{6.8}{16} = \frac{48}{16}$$

$$= \frac{48}{16}$$

7.
$$\left(\frac{AB^{-2}}{C^{-2}}\right)^{-1} = \left(\frac{AC^2}{B^2}\right)^{-1} \left(\frac{9}{-4}\right)^{-1}$$

$$= \frac{B^2}{Ac^2} = \frac{(6)^2}{(-4)(2)^2} = \frac{36}{-16}$$