Practice Questions

Laws of Exponents

Directions: Select the letter of the correct answer for each question below.

1) Compute $3a^2b^3 \cdot ab^2$

a) $3a^3b^5$
b) $3ab^5$
c) $3a^2b^5$
d) $3ab$

2) Simplify $(\frac{a^3}{a^{-1}})^2$

a) a^8
b) a^4
c) a^{-2}
d) $1/a^4$

3) Express $a^{-1}b^{-3}c^2$ as an expression without negative exponents.

a) $\frac{ac^2}{b^3}$
b) $\frac{ab^3}{c^2}$
c) ab^3c^2
d) $\frac{c^2}{ab^3}$

4) Express $(k + m)^2(k + m)^{-1}$ as an expression without any negative exponent.

a) $(k + m)^2$
b) $(k + m)^{-1}$
c) $k + m$
d) $k^2 + m^2$

5) Apply the Laws of Exponents to compute for the value of $(3 \times 10^2)(3 \times 10^3)$

a) 900 000
b) 9 000 000

To God be the glory!

c) 90 000
d) 9 000