ALEKS® Exponents Quiz #1

Beginning Algebra / Math 100 – Master No Book (Prof. Miller)

Student Name/ID:

Instructor Note:
Directions: Every problem is worth two points. One point is for trying the problem and showing your work and one point is for getting the correct answer. There are an additional five points for demonstrating the study strategy that is posted on the board and talked about at the beginning of class.

1. Multiply.

$$2y^5v^5 \cdot 4v^4 \cdot 6y$$

Simplify your answer as much as possible.

2. Calculate.

$$\frac{7\times10^8}{2\times10^5}$$

Write your answer in scientific notation.

3. Simplify.

$$\frac{x^5}{x^{-9}}$$

Write your answer with a positive exponent only.

4. Rewrite the following without an exponent.

$$\left(\frac{5}{9}\right)^{-2}$$

5. Write 0.0005941 in scientific notation.

6. Calculate.

$$\frac{5\times10^{6}}{2\times10^{4}}$$

Write your answer in scientific notation.

7. Simplify.

$$\frac{y^{4}x^{6}}{y^{7}x}$$

8. Simplify.

$$\left(-7ab^{3}\right)^{2}$$

Write your answer without parentheses.

9. Evaluate the expressions.

$$\left(-\frac{2}{3}\right)^0 =$$

$$-(5)^0 =$$

10. Calculate.

$$\frac{6\times 10^8}{5\times 10^5}$$

Write your answer in scientific notation.

11. Simplify.

$$\left(-x^3 z^4\right)^2 \left(2x^2 y^3 z\right)$$

12. Rewrite the expression without using a negative exponent.

$$4v^{-4}$$

Simplify your answer as much as possible.

13. Simplify.

$$\left(\frac{-4a}{b^3}\right)^3$$

Write your answer without parentheses.

14. Simplify.

$$\left(\frac{2x^{-3}u}{z^{-2}}\right)^3\left(x^2z^{-1}\right)$$

Write your answer using only positive exponents.

15. Rewrite the following without an exponent.

$$(-9)^{-2}$$

Exponents Quiz #1 Answers for class Beginning Algebra / Math 100 – Master No Book

1. $48y^6v^9$
2. 3.5×10^3
3. x^{14}
4. $\frac{81}{25}$
5. 5.941×10^{-4}
6. 2.5×10^2
7. $\frac{x^5}{y^3}$
8. $49a^2b^6$
9. $\left(-\frac{2}{3}\right)^0 = 1$

   $-(5)^0 = -1$
10. 1.2×10^3
11. $2x^8y^3z^9$
12. $\frac{4}{v^4}$
13. $-\frac{64a^3}{b^9}$
14. $\frac{8u^3z^5}{x^7}$

15. $\frac{1}{81}$