Ch 4 Quiz #2

Find each product. Express using positive exponents.

1. $-5b^9 \cdot 6b^2$

Find each quotient. Express using positive exponents.

2. $\frac{6^{11}}{6^3}$

3. $\frac{r^2}{2r^3}$

Express each number in standard form.

4. 2.4×10^4

Express each number in scientific notation.

5. 0.00037

Order each set of numbers from least to greatest.

6. 7.35×10^4, 1.7×10^{-6}, 8.26×10^3 , 9.3×10^{-2}

7. Every minute, 840,000,000,000 drops of water flow over Niagara Falls. Write this number in scientific notation.

Ch 4 Quiz #2

Evaluate each expression. Express the result in scientific notation.

8. $(2.9 \times 10^{4})(1.5 \times 10^{-6})$

9. $(50{,}000)(4.2 \times 10^{2})$

10. $\frac{7.6 \times 10^{2}}{3.8}$

11. $\frac{6.03 \times 10^{14}}{9 \times 10^{-8}}$

12. $\frac{6a^{3}b^{-1}c^{-1}}{2a^{-4}b^{-2}c^{0}}$

Ch 4 Quiz #2

Write the expression using exponents.

13. $4 \cdot 4 \cdot e \cdot e \cdot e \cdot (2d - 1) \cdot (2d - 1)$

14. Evaluate $x^3 - y^2$ if $x = 9$ and $y = 4$.

Write the fraction as an expression using a negative exponent other than –1.

15. $\frac{1}{15^3}$

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

17. Evaluate $(m + n)^{-3}$ if $m = -2$ and $n = -1$.

Find the product or quotient. Express using positive exponents.

18. $8^7 \cdot 8^6$

19. $(-7m^7)(4m^7)$