NAME_____**DATE**_____**PER.**_____

Retest Review: EXPONENTS

Find each of the following.

1. Simplify the expression $2a^0b^{-4}c$

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2. Simplify $-4a^4 \cdot -5a^3$

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3. The height of a parallelogram is $6a^2b^5$ and the base of a parallelogram is $4a^3b^4$. Find the area of the parallelogram using the formula A = bh.

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4. Find the expression that represents the product $(4ab^2)(3a^3)(-2a^2b^4)$.

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5. Simplify $\dfrac{(6a^2)(4a^6)}{3a^7}$

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6. If the area of a rectangle is $12a^7b^4$ and the width of the rectangle is $4a^2b^2$, what is the length of the rectangle?

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7. Simplify the expression $(3a^2)^3(4b^2)^0$

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8. Simplify $a^{11}a^{-2}a^{-3}a^{-4}$

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9. Simplify $a^{\frac{4}{3}} \cdot a^{\frac{2}{3}} \cdot a^{\frac{1}{2}}$

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10. John buys a water tank from a company that likes to use exponents as dimensions. The tank he buys has the dimensions b^2 by b^4 by $4c^3$. What is the volume of the water tank?

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11. Simplify $\left(2a^{\frac{1}{3}}\right)^4$

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