Using the Laws of Exponents to Solve Problems

Name:

Date:

Vocabulary Review:
In your own words, define each of the following vocabulary terms.

- Exponents

- Laws of Exponents

- Substitute

- Variable

Apply New Learning:
1. Explain how you would solve for r in the formula $A = \pi r^2$.

2. Explain what you do with the two exponents when the bases are the same and are multiplied together.

3. Explain what you do with the two exponents when the bases are the same and are being divided.

4. The area of a rectangle measures $63x^7y^9$. The length of the rectangle measures $9x^2y^4$. What is the width of the rectangle?

5. Lyla buys a fish tank that has the dimensions b^2 by b^4 by $4c^3$. What is the volume of her new fish tank?