Name:

UNIT 2: Solving and Operations

Concepts:

-Linear equations and inequalities

-Absolute value equations and inequalities

-Rational exponents

-Radical equations

-Add, Subtract, Multiply, Divide Functions

-Composition of Functions

-Inverses

Solve each equation.

1.  2.  3. 

4. (a) Write the formula for the perimeter of a rectangle:

(b) Re-arrange the formula and solve for w (width):

Solve each inequality.

5.  6.  7. 

Solve each absolute value equation or inequality. (Make sure to check for extraneous solutions)

8.  9.  10. 

11.  12.  13. 

Simplify using the properties of exponents.

14.  15. 16.

Re-write the following expressions using rational exponents.

17.  18. 

Write the expression in simplest form.

19.  20. 

21.  22. 

23. 

Solve each radical equation. Check for extraneous solutions.

24.  25. 

26.  27. 

28. Find the inverse of the function y=3x-2. 19. Let f(x)=4x-2 and g(x)=.

Are f(x) and g(x) inverses of each other?