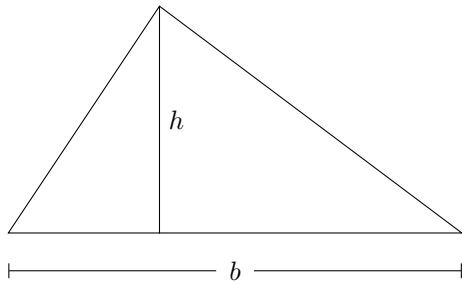# Homework 6 June 22, 2016

Solve the following equations for the indicated variable.

1.) $2j + 5 = k; j$

2.) $x = \dfrac{1}{2}(y + 4); y$

3.) Consider the following figure.

a. Solve $A = \dfrac{1}{2}bh$ for b.

b. Find the value of b when $A = 22$ and $h = 4$.

4.) To go from Celsius to Fahrenheit we have the following equation: $F = \dfrac{9}{5}C + 32$

    a. Solve the formula above for Celsius C.

    b. Normal body temperature is 98.6°. Use your formula from part **a.** to find this temperature in degrees Celsius.

5.) The formula for the perimeter of a rectangle is $P = 2l + 2w$. Find the area that has perimeter P of 18 centimeters and length l of 6 centimeters. (*HINT:* You can begin by solving the perimeter formula for w.)

w

l