Math 2: Solving for a variable of interest p. 39 #13   name_____

1.   Solve $C = \pi d$ for d

a.   Of a circular swimming pool is 200 feet around, what is the diameter of the pool.

b.   A circular garden is enclosed with 50 feet of fencing. What is the diameter of the garden?

2.   Solve $A = lw$ for w

a.   If the length of a rectangular sandbox is set at 16 feet, what width is required to obtain an area of 200 square feet?

b.   If the length of the sandbox was to increase, but the area was to remain 200 square feet, how would the width have to change?

3.   Solve $P = 2l + 2w$ for w

a.   If you have 52 feet of lumber to construct the sides of a sandbox, and the length is set at 16 feet, how wide can the sandbox be?

b.   If the length of the sandbox was to increase, but the perimeter was to remain at 52 feet, how would the width have to change?

4.   Solve $V = lwh$ for h

a.   In designing a box to have a volume of 1000 cm^3, length 20, and width 10, what is the height?

b.   If the volume of the box was to increase, but the length and width were to remain unchanged, how would the height have to change?

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

a.   If a triangle has an Area of 100 cm and a height of 10 cm what will the length of the base be.

6.   Solve $A = \dfrac{1}{2}h(b_1 + b_2)$ for b_1

a.   If a trapezoid has an area of 100 cm, a height of 5 cm, and a base of 2 cm, how big must the other base be.