<u>6th Review #84</u> – MUST SHOW WORK FOR EACH PROBLEM ***NO CALCULATORS on 5***

1. Bob wants a border around the outside of his circular pool. The pool has a radius of 9.5 feet. How much border will he need to border his pool? *(Draw the figure; write the formula; use formula to solve)*

A 29.83 feet

B 283.39 feet

C 59.66 feet

D 1,133.54 feet

2. Jake has a square room that he wants to border. The side length is 14 ft. How much border does he need?

3. Create a ratio table from the ratio 3:5

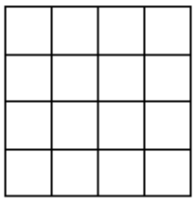
X	Y
3	5
6	
9	
12	

Name_____

4. Simplify the expression below and write as an improper fraction. *(Show PEMDAS and work to solve problem)*

$$\frac{30 + 4 \bullet 5}{2}$$

5. The model below represents 1 whole and is divided into equal parts. Shade the model to represent $^3/_8$ of the whole. *(Prove that you have shaded this amount)*



6. Use the numbers below to create an ordered pair located on the y – axis. *(Show how you know the ordered pair is on the y-axis)*

(☐ , ☐)

-6 **-2** **0** **3** **5**

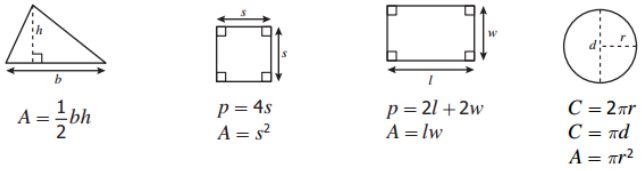
<u>Adv. Review #84</u> (7th grade SOLs)
SHOW HOW YOU SOLVED EACH PROBLEM –

7. Solve.

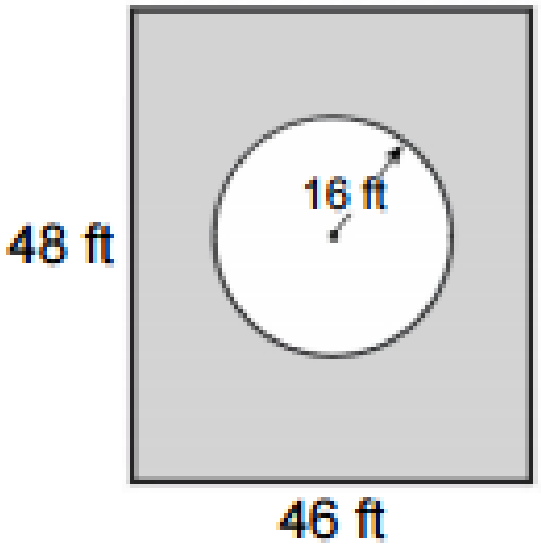
$$(-4)^4$$

8. How much area is shown in the shaded region? (*Hint: Find the area of both the shapes)*

Geometric Formulas



$A = \frac{1}{2}bh$ | $p = 4s$, $A = s^2$ | $p = 2l + 2w$, $A = lw$ | $C = 2\pi r$, $C = \pi d$, $A = \pi r^2$



9. Model the following expression with counter chips (+, -); then solve.

-1 + 7

10. If a square room has an area of 4 square meters, what is the side length of the room?