Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hr. \_\_\_\_\_\_\_\_ Pre-Algebra ROCKS!!!

**REVIEW…SIWS (Inv. 1 & 2)**

1. Find the area of the entire shape



1. The Rothschild Aquatic Center is trying to set their summer budget. In order to do so, they make some predictions for the summer. They calculate **profit *P***based on the number of **visitors *V*** to the water park. The pool workers also know the number of visitors is based on the probability of **rain R** occurring. Use the following equations to answer each question. ***show all work***

 P = 3.75V − 450 V = 400 − 200R

* 1. Write an equation for the **profit P** using the chances of **rain *R***.
	2. If the park were expecting to make $1000, what would the probability of rain be?
	3. Suppose the probability of rain is 60%. What profit can the water park

expect?

3) Write the equation and find 4) Find the area of the pool below

the area of the ***shaded region***.

Use A= πr2 and A = bh for help



Solve each equation. Show all work!



5) 3 - 4x + 6 = 53 6) 3 - (x – 2) = -25 7)

Random answers: 7% 386 P=1050-75R -11

390.72 600 30 312.6 15