## Perimeter Challenges

In each of the problems below, build the arrangement of Lab Gear blocks and find the perimeter of the arrangement. Combine like terms and write your answer in the blank.

1. $P=$ $\qquad$
2. $P=$ $\qquad$

3. $P=$ $\qquad$
4. $P=$ $\qquad$

5. Using one $x y$-block and two $y$-blocks, build and then sketch an arrangement for each of these perimeters.
a. $2 y+2 x+4$
b. $2 x+4 y$
c. $4 y+4$
6. Arrange three blocks so that the perimeter of the resulting figure is $4 x+4$.

How many solutions can you find? $\qquad$
7. Arrange four blocks so that the perimeter of the resulting figure is $2 x+2 y+4$. How many solutions can you find? $\qquad$

