## Lesson 11 Practice Problems

1. Cylinder A, B, and C have the same radius but different heights. Put the cylinders in order of their volume from least to greatest.
A

B

C

2. Two cylinders, $a$ and $b$, each started with different amounts of water. The graph shows how the height of the water changed as the volume of water increased in each cylinder. Match the graphs of $a$ and $b$ to Cylinders P and Q. Explain your reasoning.

Q

3. Which of the following graphs could represent the volume of water in a cylinder as a function of its height? Explain your reasoning.



4. Together, the areas of the rectangles sum to 30 square centimeters.

a. Write an equation showing the relationship between $x$ and $y$.
b. Fill in the table with the missing values.

| $x$ | 3 |  | 8 |  | 12 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $y$ |  | 5 |  | 10 |  |

(From Unit 5, Lesson 3.)

