## Using literal equations

**Warm-up:** The warm-up is a short review of the area and perimeter of a rectangle and the concepts explored during this lesson.

Quadrant I: This problem has students write the perimeter of the rectangle with respect to length and width. Include units.

Quadrant II: This problem reviews concretely the perimeter of a rectangle with units.

Quadrant III: This problem has students write the area of the rectangle with respect to length and width. Include units.

Quadrant IV: This problem reviews concretely the area of a rectangle. Introduce the idea of two dimensions and $cm$.

**Page 4:**

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| CA 5.0/7G.1 | CA 5.0/7G.1 |
|---|---|
| Find the *perimeter* of a rectangle if the length is 4 centimeters and width is 7 centimeters. What are the units? | The *perimeter* of a rectangle is the distance around a rectangle.  Find the *perimeter* for the figures below:<br><br>Width (W units)<br><br>Length (L units) |
| CA 5.0/7G.1 | CA 5.0/7G.1 |
| The *area* of a rectangle is the number of square units inside the rectangle.  For the figure in Q1, the *area* is? | Find the area of the rectangle described in Q2.  What are the units? |

An equation or formula with different variables is called a literal equation.  Today we will be working with several literal equations that are frequently used in science and mathematics.

3. Plot the points A (1, -1), B (-2,3), and C (-2, -1) on the centimeter graph.  Then, draw the
   triangle formed by the points.   Find the lengths of the following line segments:

$\overline{BC} =$

$\overline{CA} =$

$\overline{BA} =$

Another way to identify sides of a triangle is:

$\overline{BC} = $ side a $=$

$\overline{CA} = $ side b $=$

$\overline{BA} = $ side c $=$

3b.

4. The area of

7. Y

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10. In Seattle you get a job washing cars.  You wash 3 cars per hour (