

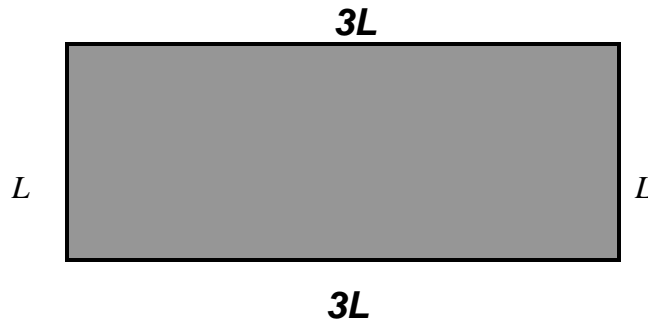
**PROBLEM-OF-THE-DAY: ALGEBRA 1**  
**WEEK:** October 8 to October 12      **DAY:** Monday

**RISD Objective:** Given a figure (including composite figures) and/or a word problem, students will find the perimeter or circumference, applying it as necessary.

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**PROBLEM #34**

A piece of pipe 64 cm long is bent into the shape of a rectangle whose width is three times its length. Find the dimensions of the rectangle. Show your work.



## MODEL SOLUTION #34

$$2L + 2W = 64$$

The width is three times the length, so:

$$W = 3L$$

Then:

$$2L + 2(3L) = 64$$

$$2L + 6L = 64$$

$$8L = 64$$

$$L = 8$$

Since  $W = 3L$ , then  $W = 24$ , and the rectangle is 8 centimeters long and 24 centimeters wide.