

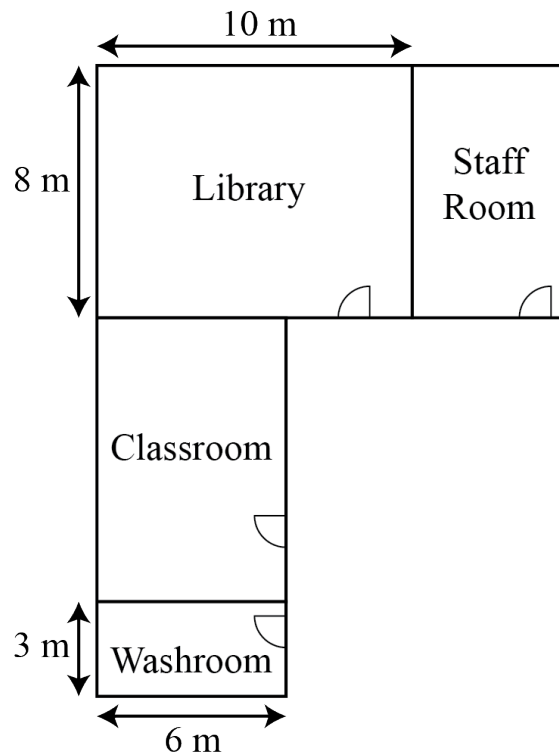


Problem of the Week

Problem A

Room to Grow

Ada Lovelace Public School needs to add a new wing to its main building that includes a classroom, library, staff room, and washroom. The plans for the addition are shown, with all new rooms being rectangular; however, some of the measurements are missing.



Fortunately, the contractor remembered the following extra details:

The length of the classroom is three times the width of the washroom.
The width of the staff room is half the length of the library.

When describing the dimensions of a rectangle, the contractor uses *length* to describe the longer side, and *width* to describe the shorter side.

- What are the missing dimensions of the classroom and the staff room?
- What is the total floor area of the four new rooms?