



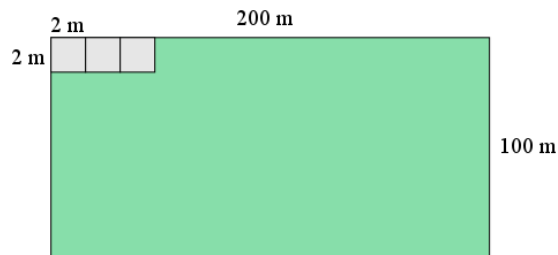
Problem of the Week

Problem B

Work it Out

A gym is hosting an outdoor group exercise class. For many of the exercises, participants will need to make sure they are spaced well apart.

- (a) A large grassy field has dimensions of 100 m by 200 m. The field was divided into squares that were each 2 m by 2 m, as shown.



If one person was in the middle of each square, how many people could be on the field?

- (b) Imaginary Park is exactly 1 km by 1 km, or 1 km^2 , which is equivalent to 100 hectares (ha) in size. If this park was divided into 2 m by 2 m squares for an exercise class like in part (a), and there is one person in the middle of each square, how many people would be in this park? How many people per hectare is that?
- (c) Stanley Park is located in Vancouver, BC. While not a rectangle, it covers an area of 405 hectares. Suppose that $\frac{1}{5}$ of the park is not forested. If the number of people per hectare in the non-forested area of Stanley Park is the same as the number of people per hectare in Imaginary Park in part (b), how many people could do the exercise class in the non-forested area of Stanley Park?