# Problem 2 

Undergraduate Problem Solving Contest<br>Due: October 31

October 17, 2016

## 1 Partions into rectangles

How many ways can we partition the following shape into rectangles with integer side lengths? Note: the shape is to scale, with each dashed square a unit square.


## 2 ATTENTION: For the Programmers

You may choose to write a program to compute the answer, rather than manually computing. In which case, also compute the number of partitions of the following shape and include psudocode of the code you used in your solution. Again, the shape below is to scale, with each dashed square a unit square.


## 3 example partitions into rectangles



