



## 15-2

A greedy counterexample:

Suppose we had a rod of length 6

And  $p_1 = 2$ ,  $p_2 = 15$ ,  $p_3 = 34$ ,  $p_4 = 36$

A greedy solution would take rod  $p_3$  as it is the most dense, and follow it with

p4 followed by p2 totaling to  $36 + 15 = 51$ , however ideally it would have chosen P3 twice which is  $36 * 2 = 72$