Rod Cutting Example

Length	0	1	2	3	4	5
p _i	0	3	5	10	12	14
ri						
Si						

$$r(j) = \begin{cases} 0 & \text{for } j = 0\\ \max_{1 \le i \le j} (r(i) + r(j - i)) & \text{for } j > 0 \end{cases}$$