## **Gold Chain problem**

A traveller is stranded in an out-of-the way place. He has no money, but has sent for some. It will take two months to reach him. He has, however, a gold chain of 63 links. His landlord charges him 1 link per day for his board and lodging; moreover, he will neither accept payment in advance nor give credit – he insists upon receiving 1 link per day.

The traveller does not want to cut more links of the chain than is absolutely necessary, for when his money comes he will be able to redeem it. But he obviously he must cut some, for he has to pay the landlord one link every day.

What is the smallest number of links that he need cut to comply with the landlord's conditions?