Puzzle 4 | (Pay an employee using a 7 units gold rod?)

An employee works for an employer for 7 days. The employer has a gold rod of 7 units. How does the employer pays to the employee so that the employee gets 1 unit at the end of everyday. The employer can make at most 2 cuts in rod.

Solution:

Employer can pay for seven days by making 2 cuts in a way that he has 3 rods of size 1, 2 and 4.

1st Day: Employer gives 1 unit cut.

2nd day: Takes back 1 unit cut from employee given on first day and gives 2 unit cut.

3rd Day: Gives both 1 unit and 2 unit cuts.

4th Day: Takes back cuts of 1 and 2 units. Gives the cut of 4 units.

5th Day: Gives cut of 1 unit.

6th Day: Takes back cut of 1 unit and gives cut of 2 units.

7th Day: Gives cut of 1 unit.