- The **principal** is the amount of money owed at any particular time. Interest is charged on the loan principal. To pay off a loan, you must gradually pay down the principal.
- an **Installment loan**(or **amortized loan**) is a loan that is paid off with equal regular payments.
- The loan term is the time you have to pay back the loan in full.

$$PMT = \frac{P * \frac{R}{n}}{[1 - (1 + \frac{R}{n})^{-nt}]} \tag{1}$$

- $\bullet \ {\bf P}{=} \ {\rm starting} \ {\rm loan} \ {\rm principal}$
- PMT= regular payment or deposit
- R= Annual rate (in decimal)
- n= Number of compounding periods per year
- T= Time