

Formulae:

1. If $ax^2 + bx + c = 0$ then

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

2. If $f(x) = ax^2 + bx + c$ then

$$\left(\frac{-b}{2a}, f\left(\frac{-b}{2a}\right) \right)$$

or

$$h = \frac{-b}{2a} \quad k = \frac{4ac - b^2}{4a}$$

3.

$$S = P + I = P + Prt = P(1 + rt)$$

$$S = P \left(1 + \frac{r}{m}\right)^{mt} = P(1 + i)^n$$

or

$$FV = PV \left(1 + \frac{j}{m}\right)^{mt} = PV(1 + i)^n$$

4.

$$S = R \left[\frac{(1 + i)^n - 1}{i} \right] = R \left[\frac{\left(1 + \frac{r}{m}\right)^{mt} - 1}{\frac{r}{m}} \right]$$

or

$$S = R \left[\frac{(1 + i)^n - 1}{i} \right] = R \left[\frac{\left(1 + \frac{j}{m}\right)^{mt} - 1}{\frac{j}{m}} \right]$$

5.

$$A = R \left[\frac{1 - (1 + i)^{-n}}{i} \right] = R \left[\frac{1 - \left(1 + \frac{r}{m}\right)^{-mt}}{\frac{r}{m}} \right]$$

or

$$A = R \left[\frac{1 - (1 + i)^{-n}}{i} \right] = R \left[\frac{1 - \left(1 + \frac{j}{m}\right)^{-mt}}{\frac{j}{m}} \right]$$