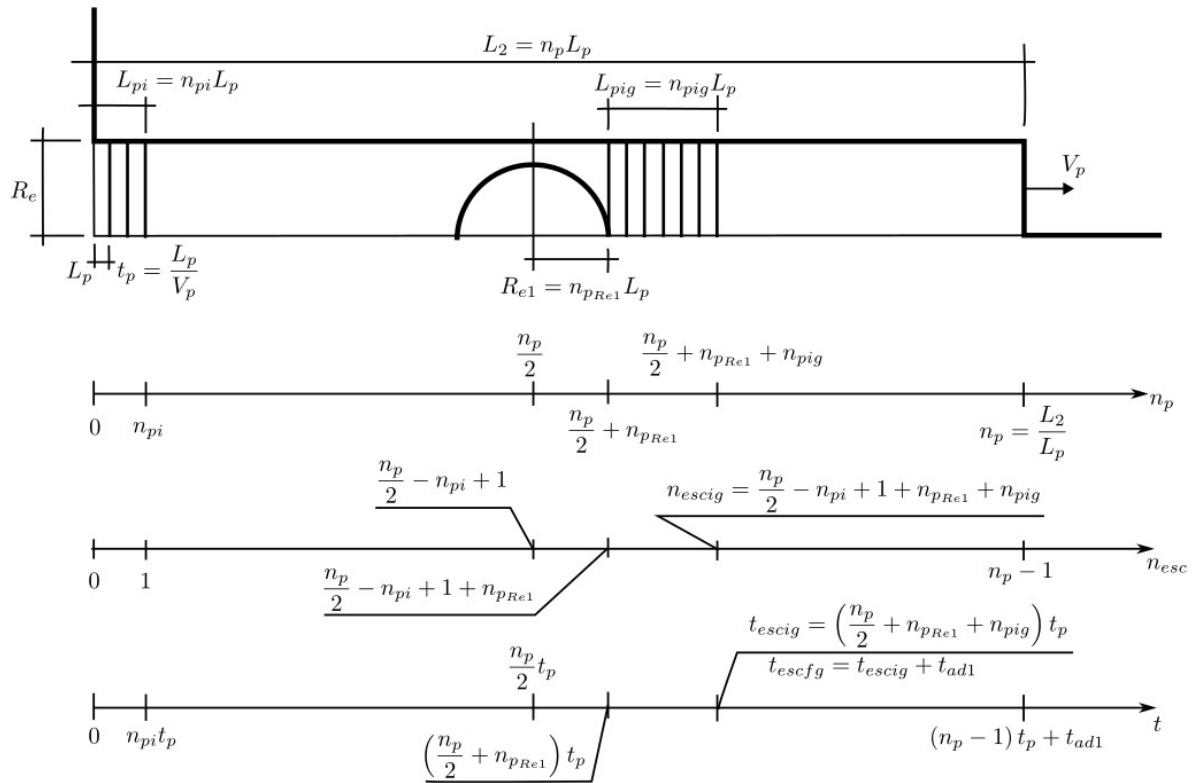


Created using a free version of SMath Studio CALCULATION OF THE NUMBER OF STEPS, NUMBER OF EXCAVATION AND TIMES



Initial data

$$\begin{aligned}
 Re &:= 1 \text{ m} & npi &:= 3 \\
 Lp &:= \frac{1}{3} \cdot Re = 0,3333 \text{ m} & np &:= 100 \\
 Vp &:= 12,5 \frac{\text{m}}{\text{day}} & npig &:= 15 \\
 d1 &:= 16 \cdot Re = 16 \text{ m} & npRe1 &:= 2 \\
 Vp1 &:= 12,5 \frac{\text{m}}{\text{day}} & np1 &:= 3
 \end{aligned}$$

Initial calculations

$$\begin{aligned}
 n &:= 31 \\
 L2g &:= \frac{d1}{2} - Re = 7 \text{ m} \\
 Re1 &:= npRe1 \cdot Lp = 0,6667 \text{ m} \\
 K &:= \frac{\left(\frac{d1}{2} - Re\right)}{n \cdot Re1} = 0,3387 \\
 Lp1 &:= K \cdot Re1 = 0,2258 \text{ m} \\
 np1 &:= \frac{L2g}{Lp1} = 31 \\
 nesclresto &:= (np1 - np1) = 28 \\
 nescl &:= nesclresto + 1 = 29 \\
 tp1 &:= \frac{Lp1}{Vp1} = 0,0181 \text{ day} \\
 tad1 &:= (nesclresto) \cdot tp1 = 0,5058 \text{ day}
 \end{aligned}$$

