2020/4/14

$T = t$

$$T(t) = \begin{cases} \frac{7}{5}t + 20, & \text{para } 0 \le t < 100 \\ \frac{2}{125}t - \frac{16}{5}t + 320, & \text{para } t \ge 100 \end{cases}$$

$0 \le T < 100$

$T \ge 100$

$T_0 = 48c^\circ$ $\quad t = ?$

$T_{fc} = 200c^\circ$

$T = 152\,c^\circ$ $\quad T(t) = A$

$T_1 = 100 - T_0 = 52$

$T_2 = T - T_1 = 100c^\circ$

$T_3 = T_1 + T_2 = T$

$t = T(T_1) + T(T_2) = 94,4$

Para T_1, $52(t) = \frac{7}{5}t + 20$

$\frac{52t}{52} = \frac{\frac{7}{5}t + 20}{52}$

$\frac{t}{1} = \frac{\frac{7}{5}t + 20}{52}$

$52t = \frac{7}{5}t + 20$

$T(t) = \frac{7}{5}(52) + 20 = 92,8$

$T(t) = \frac{2}{125}(100) - \frac{16}{5}(100) + 320 = 1,6$

$T(t) = \frac{2}{125}(152) - \frac{16}{5}(150) + 320 =$

$48 = \frac{7}{5}t_1 + 20$

$t_1 = 7(48) - 5 + 20$

$48 = \frac{7}{5}t + 20$

$48 - 20 = \frac{7}{5}t$

$28 = \frac{7}{5} \cdot t$

$28,5 = 7,t$

$140 = 7 \cdot t$

$\frac{140}{7} = t$

$20 = t$

$7(\frac{t}{48}) = \frac{7}{5}(48) + 20$

$48t_1 = \frac{7}{5}t + 20$

$7t + 48t = 20$

$\frac{7}{5}t + t = \frac{20}{48}$

$t = \frac{20}{48} \div \frac{7}{5} \div 2$

$48 = \frac{7}{5}t + 20$

$-\frac{7}{5}t = -48 + 20$

$-7,5t = -28$

$t = \frac{-21}{7}$

$t = 7,3$