last minute

$$0 \leqslant \frac{K}{H} \leqslant \frac{1}{2}$$

$$\frac{1}{2}\boxed{\frac{\begin{array}{c}(1-\alpha)\left(\frac{V}{2}-\frac{Kt}{4H}\right)\\ +\alpha\left(V-\frac{Kt}{2H}\right)\end{array}}{\left\{\frac{V}{2}-\frac{Kt}{2H}\right.}}1-\frac{K}{2H}\boxed{\frac{\begin{array}{c}(1-\alpha)\left(V-\frac{t}{2}\right)\\ +\alpha\left(V-\frac{Kt}{2H}\right)\end{array}}{\left\{V-\frac{t}{2}\right.}}\frac{3}{2}-\frac{K}{H}\boxed{\frac{\begin{array}{c}(1-\alpha)\left(t-\frac{Kt}{H}\right)\\ +\alpha\left(V-\frac{Kt}{2H}\right)\end{array}}{\left\{t-\frac{Kt}{H}\right.}}$$

$$J = L \Rightarrow \alpha = 0\text{:}\quad H = \infty \Rightarrow \frac{K}{H} = 0$$

$$\frac{1}{2}\boxed{\frac{\frac{V}{2}}{\left\{\frac{V}{2}\right.}}1\boxed{\frac{V-\frac{t}{2}}{\left\{V-\frac{t}{2}\right.}}\frac{3}{2}\boxed{\frac{t}{\left\{t\right.}}}\text{ both periods agree}$$

$$\frac{1}{2} \leqslant \frac{K}{H} \leqslant \frac{2}{3}$$

$$\frac{1}{2}\boxed{\frac{\frac{V}{2}}{\left\{\right.}}\frac{K}{H}\boxed{\frac{\begin{array}{c}(1-\alpha)\left(\frac{V}{2}-\frac{Kt}{4H}\right)\\ +\alpha\left(V-\frac{Kt}{2H}\right)\end{array}}{\left\{\frac{V}{2}-\frac{Kt}{2H}\right.}}1-\frac{K}{2H}\boxed{\frac{\begin{array}{c}(1-\alpha)\left(V-\frac{t}{2}\right)\\ +\alpha\left(V-\frac{Kt}{2H}\right)\end{array}}{\left\{V-\frac{t}{2}\right.}}\frac{3}{2}-\frac{K}{H}\boxed{\frac{\begin{array}{c}(1-\alpha)\left(t-\frac{Kt}{H}\right)\\ +\alpha\left(V-\frac{Kt}{2H}\right)\end{array}}{\left\{t-\frac{Kt}{H}\right.}}$$

$$J = H \Rightarrow \alpha = 1$$

$$\frac{1}{2}\boxed{\frac{\frac{V}{2}}{\left\{\right.}}\frac{K}{H}\boxed{\frac{V-\frac{Kt}{2H}}{\left\{\right.}}1-\frac{K}{2H}\boxed{\frac{V-\frac{Kt}{2H}}{\left\{\right.}}\frac{3}{2}-\frac{K}{H}\boxed{\frac{V-\frac{Kt}{2H}}{\left\{\right.}} = \frac{1}{2}\boxed{\frac{\frac{V}{2}}{\left\{\right.}}\frac{K}{H}\boxed{\frac{V-\frac{Kt}{2H}}{\left\{\right.}}$$