

	Coordinate Time	Spacetime Interval	Proper Time
Definition	Time between two events in an inertial frame measured with synchronized clocks - one at each event	Time between two events measured by the same, inertial clock at both events.	Time between two events measured by the same, inertial clock at both events.
Equation	Δt	$\Delta s = \sqrt{\Delta t^2 - \frac{\Delta d^2}{c^2}}$	$\Delta s_{AB} = \Delta \tau = \int_{t_A}^{t_B} \sqrt{1 - \frac{v^2}{c^2}} dt$
Frame independent?	No	Yes	Yes
Geometric analog	coordinate difference	distance	pathlength

$$\Delta t \geq \Delta s \geq \Delta \tau$$