

$$\Delta t = \frac{\alpha^{\frac{3}{2}}}{\sqrt{GM}} \cdot \left[\int_{0}^{\theta_{f}} \frac{1}{(1 + \epsilon \cos \theta)^{2}} d\theta - \int_{0}^{\theta_{f}} \frac{1}{(1 + \epsilon \cos \theta)^{2}} d\theta \right]$$

```
{ %DELTA t = \{ \text{ %alpha } ^ \{ 3 \text{ over 2 } \} \text{ over sqrt } \{ G M \} \}  cdot left [ int from \{ 0 \} \text{ to } \{ \text{ %theta }_f \} \{ 1 \text{ over } ( \{ 1 + \text{ %epsilon cos %theta } ) ^ 2 \} \text{ d %theta - int from } \{ 0 \}  to \{ \text{ %theta }_i \} \{ \{ 1 \text{ over } ( \{ 1 + \text{ %epsilon cos %theta } ) ^ 2 \} \text{ d %theta } \}  right \} \}
```