

$$r := 10 \quad \lambda := 0.6$$

$$\frac{d}{dt} \left[r \cdot \left[1 - \cos(f(t)) + \frac{1}{\lambda} \cdot \left[1 - \left(1 - \lambda^2 \cdot \sin(f(t))^2 \right)^{0.5} \right] \right] \right] \text{float}, 4 \rightarrow 10 \cdot \sin(f(t)) \cdot \frac{d}{dt} f(t) + \frac{6.000}{\left(1 - .36 \cdot \sin(f(t))^2 \right)^{.5}} \cdot \sin(f(t)) \cdot \cos(f(t)) \cdot \frac{d}{dt} f$$

$$s(\phi) = r \cdot \omega \cdot \left[\sin(\phi) + \frac{\lambda}{\left(1 - \lambda^2 \cdot \sin(\phi)^2 \right)^{.5}} \cdot \sin(\phi) \cdot \cos(\phi) \right]$$