

```

[> restart
[> EcuacionDinamica := Masa·diff(s(t), t$2) = -Hooke·s(t)
      EcuacionDinamica := Masa  $\left( \frac{d^2}{dt^2} s(t) \right) = -Hooke s(t)$  (1)
[> CondicionesIniciales := s(0) = - $\frac{381}{1000}$ , D(s)(0) = 0;
      CondicionesIniciales := s(0) = - $\frac{381}{1000}$ , D(s)(0) = 0 (2)
[> Masa :=  $\frac{\left(\frac{16}{1000}\right)}{\left(\frac{981}{100}\right)}$ ; Hooke :=  $\frac{\left(\frac{437}{100}\right)}{\left(\frac{5}{10}\right)}$ 
      Masa :=  $\frac{8}{4905}$ 
      Hooke :=  $\frac{437}{50}$  (3)
[> EcuacionDinamica;
       $\frac{8}{4905} \frac{d^2}{dt^2} s(t) = -\frac{437}{50} s(t)$  (4)
[> Solucion := dsolve({EcuacionDinamica, CondicionesIniciales})
      Solucion := s(t) = - $\frac{381}{1000} \cos\left(\frac{3}{20} \sqrt{238165} t\right)$  (5)
[>

```