

```

In[1]:= P = 73 600
A = 2.13
cw = 0.29
ρ = 1.2
k = A * cw * ρ / 2
m = 1440
B = NDSolve[{s''[t] == (P - k * s'[t]^3) / (m * s'[t]), s[0] == 0, s'[0] == 0.0005},
  s, {t, 200}, WorkingPrecision -> 30]
Plot[Evaluate[s'[t] /. B] * 3.6, {t, 0, 200}, PlotRange -> All]

```

Out[1]= 73 600

Out[2]= 2.13

Out[3]= 0.29

Out[4]= 1.2

Out[5]= 0.37062

Out[6]= 1440

⋮ NDSolve: The precision of the differential equation

$\left\{\left\{s''[t] == \frac{73600 - 0.37062 \ll 1 \gg^{(\ll 1 \gg)}[\ll 1 \gg]^3}{1440 s'[t]}, s[0] == 0, s'[0] == 0.0005\right\}, \{\}, \{\}, \{\}\right\}$ is less than WorkingPrecision (30.).

Out[7]= $\left\{\left\{s \rightarrow \text{InterpolatingFunction}\left[\left[\begin{array}{c} \text{+} \quad \text{Plot icon} \\ \text{Domain: } \{\{0, 200.000000000000000000000000000000\}\} \\ \text{Output: scalar} \end{array}\right]\right\}\right\}$

