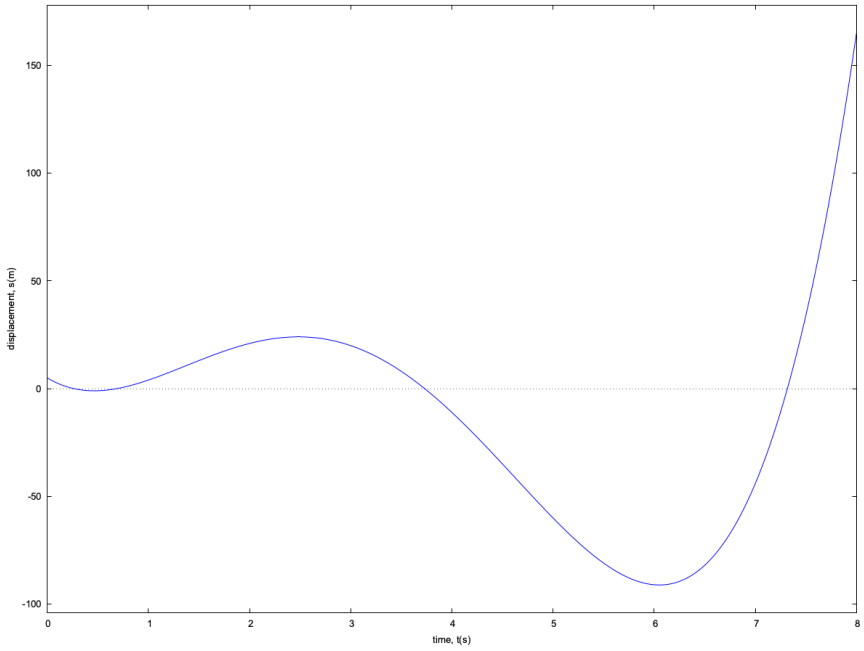
(% i8) s: t^ 4 - 12*t^ 3 + 38*t^ 2 - 28*t + 5;

(s) $t^4 - 12t^3 + 38t^2 - 28t + 5$

(% i47) wxplot2d([s],[t,0,8], [xlabel,"time, t(s)"], [ylabel,"displacement, s(m)"]);

(% t47)



(% o47)

(% i31) factor(s);

(% o31) $\left(t^2 - 8t + 5\right)\left(t^2 - 4t + 1\right)$

(% i32) solve(t^ 2-8*t+5, t);

(% o32) $\left[t = 4 - \sqrt{11}, t = \sqrt{11} + 4\right]$

(% i33) solve(t^ 2 -4*t+1, t);

(% o33) $\left[t = 2 - \sqrt{3}, t = \sqrt{3} + 2\right]$

```
(% i37) root1 : 2 - sqrt(3);
        root2 : 4 - sqrt(11);
        root3 : 2 + sqrt(3);
        root4 : 4 + sqrt(11);
```

(root1) $2-\sqrt{3}$

(root2) $4-\sqrt{11}$

(root3) $\sqrt{3}+2$

(root4) $\sqrt{11}+4$

```
(% i42) float(root1);
```

(% o42) 0.2679491924311228

0.27 (to 2 d.p)

```
(% i43) float(root2);
```

(% o43) 0.6833752096446002

0.68 (to 2 d.p)

```
(% i44) float(root3);
```

(% o44) 3.732050807568877

3.73 (to 2 d.p)

```
(% i45) float(root4);
```

(% o45) 7.3166247903554

7.32 (to 2 d.p)