

```
[> eq := diff(y(x),x) = 2*x;
[> dsolve(eq, y(x));
[> ini := y(1) = 5;
[> dsolve({eq, ini}, y(x));
[> eq := diff(y(x),x,x) = 0;
[> dsolve(eq, y(x));
[> ini := y(0) = 3, D(y)(0) = 2;
[> dsolve({eq, ini}, y(x));
[> eq := diff(y(x),x,x) + a*y(x)= 0;
[> eq := diff(y(x),`$^(x,2))+a*y(x) = 0;
[> dsolve(eq, y(x));
[> de1 := diff(y(x),x$2) + 5*diff(y(x),x) + 6*y(x) = 0;
[> dsolve(de1, y(x));
[> ini := y(0) = 0, D(y)(0) = 1;
[> dsolve({de1, ini}, y(x));
```