```
    |\^/|      MAPLE V
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 <____ ____>   Waterloo Maple Software.
      |        Type ? for help.

#
# printing out messages.  Note backquotes:‘,  NOT ’
#
> print(‘hello world!‘);

                                  hello world!

#
# compute a summation (note:gives general form)
#
> sum(i^3, i=1..n);

                              4               3               2
                   1/4 (n + 1)  - 1/2 (n + 1)  + 1/4 (n + 1)

#
# normalize
#
> normal(");

                                  4        3        2
                            1/4 n  + 1/2 n  + 1/4 n

> expr1 := x-1;

                                 expr1 := x - 1
```

```
> expr2 := (3*x*y - 2*y^2)/(6*x^2-6*y) + expr1;

                                             2
                                  3 x y - 2 y
                         expr2 := ------------ + x - 1
                                      2
                                   6 x  - 6 y

#
# find taylor expansions of different orders, different variables
#
> taylor(expr2,x=0,3);

                                                 2      3
                      (1/3 y - 1) + 1/2 x + 1/3 x  + O(x )

> taylor(expr2,x=0,4);

                                            2    1   3      4
                 (1/3 y - 1) + 1/2 x + 1/3 x  - --- x  + O(x )
                                                2 y

> taylor(expr2,y=0,3);

                              1           - 2 + 3/x  2      3
                   (x - 1) + --- y + 1/6 --------- y  + O(y )
                             2 x                2
                                               x
```

```
#
# divide two poynomials, return true if exact division possible.
#
> divide(x^11-x^10+x-1,expr1,‘quotient‘);

                                     true

> print(quotient);

                                    10
                                   x   + 1

> quit
```