```
> f:=proc(x)
> evalf(x^x);
> end;
                    f := proc(x) evalf(x^x) end
> fp:=proc(x)
> evalf((x^x)*(1+ln(x)));
> end;
               fp := proc(x) evalf(x^x*(1 + ln(x))) end
> y:=proc(x)
> evalf(ln(x)/LambertW(ln(x)));
> end;
            y := proc(x) evalf(ln(x)/LambertW(ln(x))) end
> yp:=proc(x)
> evalf(1/(x*(1+LambertW(ln(x)))));
> end;
         yp := proc(x) evalf(1/(x*(1 + LambertW(ln(x))))) end
> y0:=proc(x)
> evalf(ln(x)/LambertW(-1,ln(x)));
> end;
          y0 := proc(x) evalf(ln(x)/LambertW(-1, ln(x))) end
> y0p:=proc(x)
> evalf(1/(x*(1+LambertW(-1,ln(x)))));
> end;
      y0p := proc(x) evalf(1/(x*(1 + LambertW(-1, ln(x))))) end
> e:=exp(1);
                             e := exp(1)
> evalf(e);
                             2.718281828
> xm:=1/e;
                                    1
                             xm := ------
                                   exp(1)
> evalf(xm);
                             .3678794412
> fm:= evalf(e^(-1/e));
                          fm := .6922006276
> f(0.0000000001);
                             .9999999977
> fp(0.0000000001);
                             -22.02585088
> f(xm);
                             .6922006276
> fp(xm);
                                  0
> f(1);
                                  1.
> fp(1);
                                  1.
> y0(0.999999999);
                                        -10
                          .4184622261 10
```

```
> y0p(0.999999999);
                                -.04367380643
> y0(fm);
                                 .3678721911
> y0p(fm);
                                 -73303.62599
> y(fm);
                                 .3678866913
> yp(fm);
                                 73304.36989
> y(0.999999999);
                                 .9999999990
> yp(1);
                                      1.
> y(4);
                                 2.000000000
> yp(4);
                                 .1476540273
>
```