

```

> 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;

xm := 1
-----
exp(1)

> evalf(xm);

.3678794412

> fm:=e^(-1/e);

fm := exp(1)
/ 1 \
|- ----|
\ exp(1)/

> evalf(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
>
```