In [1]:

```
g(x)=tan(x)
show(taylor(g(x),x,0,10))
```

Out[1]:

$$\frac{62}{2835} x^9 + \frac{17}{315} x^7 + \frac{2}{15} x^5 + \frac{1}{3} x^3 + x$$

In [2]:

```
show(integrate(g(x),x))
```

Out[2]:

$$\log(\sec(x))$$

In [3]:

```
f(x)=ln(abs(sec(x)))
show(f)
```

Out[3]:

$$x \mapsto \log(|\sec(x)|)$$

In [4]:

```
show(taylor(f(x),x,0,10))
```

Out[4]:

$$\frac{31}{14175} x^{10} + \frac{17}{2520} x^8 + \frac{1}{45} x^6 + \frac{1}{12} x^4 + \frac{1}{2} x^2$$

In [5]:

```
# double check
show(integrate(taylor(g(x),x,0,10),x))
```

Out[5]:

$$\frac{31}{14175} x^{10} + \frac{17}{2520} x^8 + \frac{1}{45} x^6 + \frac{1}{12} x^4 + \frac{1}{2} x^2$$

In [0]: