

In [1]:

```
var('t')
assume(t>1)
g1(t)=integral(1/(x^2),x,1,t)
show(g1)
```

Out[1]:

$$t \mapsto -\frac{1}{t} + 1$$

In [2]:

```
limit(g1(t),t=+Infinity)
```

Out[2]:

1

In [3]:

```
var('t')
assume(t>1)
g2(t)=integral(1/(x),x,1,t)
show(g2)
```

Out[3]:

$$t \mapsto \log(t)$$

In [4]:

```
limit(g2(t),t=+Infinity)
```

Out[4]:

+Infinity

In [0]: