```
> # RK4 algorithm
> # Group 1, initialize.
> f:=(x,y)->-y+1-x:
> x0:=0:y0:=3:h:=0.1:L:=[x0,y0]:
> # Group 2, repeat 10 times.
> k1:=h*f(x0,y0):
> k2:=h*f(x0+h/2,y0+k1/2):
> k3:=h*f(x0+h/2,y0+k2/2):
> k4:=h*f(x0+h,y0+k3):
> Y:=y0+(k1+2*k2+2*k3+k4)/6:
> x0:=x0+h:y0:=Y:L:=L,[x0,y0];
```

$$L := [0, 3], [0.1, 2.804837501], [0.2, 2.618730902], [0.3, 2.440818423], [0.4, 2.270320291], [0.5, 2.106530935], [0.6, 1.948811934], [0.7, 1.796585619], [0.8, 1.649329289], [0.9, 1.506569991], [1.0, 1.367879774] \quad (1)$$

```
> # Group 3, plot.
> plot([L]);
```