

Ejercicio 18

a)

```
Natural = [  
  esCero =  $\mathcal{Q}(z)$ true  
  succ =  $\mathcal{Q}(z)(z.esCero = false).pred = z$   
]
```

b)

```
iguales = [  
  arg =  $\mathcal{Q}(s)s.arg$   
  val =  $\mathcal{Q}(s)(\lambda y.($   
    or  
    (and (s.arg.esCero) (y.esCero)),  
    (  
      s.arg.esCero.if  
      (false)  
      (  
        y.esCero.if  
        (false)  
        (s (s.arg.pred) (y.pred))  
      )  
    )  
  )  
]
```