Auxiliary Notions (2)

- Replacement legitimates Image where:

```
∀f s y.
   y ∈ Image f s = ∃x. x ∈ s
                       ∧
                       (y = f x)
```

  and the notation {s} where:

```
∀s. {s} = Image (λx.s) (ℙ ∅)
```

  which satisfies:

```
∀s x. x ∈ {s} = (x = s)
```

- Infinity legitimates InfiniteSet where:

```
∅ ∈ InfiniteSet
∧
∀x. x ∈ InfiniteSet
      ⇒
      (x ∪ {x}) ∈ InfiniteSet
```