

# Writing Examples:

## Example 1

Let  $S$  be a set. Suppose  $S$  has the property that it is finite. If  $s$  is an element of  $S$ , then there exists a mapping  $f$  from  $S$  to  $S$  such that  $f(s)$  is the identity. We can see  $f$  is a bijection.

## Example 2:

It is trivial to see, by application of Lemma 3.2.1 and the previous remarks on non-compact manifolds (see [14], [22], and [29]), that the boundary vanishes. The reader can easily verify the remaining 14 cases.

## Example 3:

Integrating the function over the domain, the result is zero. The definition of the derivative of the constant function of the mapping of the space is clearly constant. It is very, very important to notice this.