

## 1 My first set of exercises

EXAMPLE 1.1 Prove that  $\frac{1}{2}\Delta(f_{ij}f^{ij}) = \nabla^k f^{ij} + f^{ij} f^k [2\nabla_i R_{jk} - \nabla_k R_{ij}]$

**SOLUTION** From ...

EXAMPLE 1.2 Prove that Paulinho is smart.

**SOLUTION** All ducks are smart. Paulinho is a duck. Therefore, Paulinho is smart.

EXAMPLE 1.3 Prove that Paulinho is smart.

**SOLUTION** All ducks are smart. Paulinho is a duck. Therefore, Paulinho is smart.

## 2 My second set of exercises

EXAMPLE 2.1 Prove that Paulinho is smart.

**SOLUTION** All ducks are smart. Paulinho is a duck. Therefore, Paulinho is smart.

EXAMPLE 2.2 Prove that Paulinho is smart.

**SOLUTION** All ducks are smart. Paulinho is a duck. Therefore, Paulinho is smart.