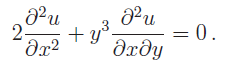
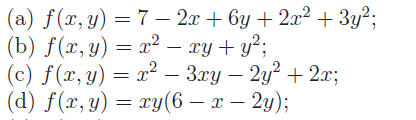
**Tutorial questions 7**

1. Find for the function:
2. Find for the function:
3. Find for the function:

1. Use the chain rule to find , for the function
2. Show that is a solution of the partial differential equation



1. Find all stationary points of the function and determine their nature:



1. A container with an open top is to have 10 capacity and be made of thin sheet metal. Calculate the dimensions of the box if it is to use the minimum possible amount of metal.