

Tutorial Worksheet 2

1) If a, b and c are three real numbers, prove that $|a - c| \leq |a - b| + |b - c|$.

2) Is it true that $(A \times A) \setminus (B \times B) = (A \setminus B) \times (A \setminus B)$? Explain.

3) True or false? Justify your answer.
 $A \times A \subset B \times B$ if and only if $A \subset B$.