

MA1971

Name: _____

Quiz 2

D Term, 2015

Show all work needed to reach your answers.

1. (4 points) If $Y = \{1, \pi, \sqrt{7}\}$, please find the power set of Y .

$\mathcal{P}(Y) =$ _____

2. (8 points) Suppose that A , B and C are all subsets of some universe U . Please show that

$$C \cap (A - B^c) \subset B - A^c$$

3. (8 points) Suppose that there are a sequence of statements $\{S_1, S_2, S_3, \dots, S_n, \dots\}$. If one is to prove all of these statements true by induction, what two steps must be proven?

(1): _____

(2): _____