CS 2102 - DMT1 - Fall 2019 — Luther Tychonievich Practice exercise in class friday september 20, 2019

Practice 04

PROBLEM 1 Set definition

Let $A = \{1, 2, 3, 4\}, B = \{2x \mid (x \in \mathbb{N}) \land x < 5\}, C = \mathcal{P}(\{2, 3\})$. Show the full set of members in each of the following sets using curly-brace notation (not set-builder or operator-defined notation):

<i>B</i> =	
C =	
<i>C</i> =	
$A \cup B =$	
$A \cap B =$	_
$A \setminus B = $	_
$A \cup C =$	
$A \cap C =$	
$\{x \mid x \in A \land x \in B\} = _$	
$\{x \mid x \in A \lor x \in B\} = _$	
$\{x \mid x \in A \land 2x \in A\} = _$	
$\left\{ x \mid (x \in B) \land (\forall y \in A . x > y) \right\} = _$	
$\left\{X \mid (X \in C) \land (\exists y \in X . y \in B)\right\} = _$	