

June 18, 2015

Quiz #3

#1) $A = \{ \{ \emptyset \} \}$
 $\rightarrow (A) = 1$

#2) $A = \{ x \mid x \text{ is an integer between } -10 \text{ and } 10 \}$
 $B = \{ x \mid x \text{ is a natural number between } 2 \text{ and } 5 \}$

$A = \{ -10, \dots, 10 \}$
 $B = \{ 2, 4 \}$

What is $B' = \{ 10, \dots, 2 \} \cup \{ 3, \dots, 1 \}$

Jun 18-11:04 AM

$A = \{ \{ \{ \{ \{ \} \} \} \}$

$A = \square$

$A = \{ \circ, \text{apple} \}$

Jun 18-11:40 AM

$U = \{ 1, \dots, 15 \}$
 $A = \{ 1, 3, 5, \dots, 15 \}$ i.e. odd
 $B = \{ 1, 4, 7, 11 \}$
 $C = \{ 2, 4, 6, \dots, 10 \}$ Even

② $(B \cup C)'$

Order of Operations

$(B \cup C)' = (\{ 1, 4, 7, 11 \} \cup \{ 2, 4, 6, 8, 10 \})'$
 $= (\{ 1, 2, 4, 6, 7, 8, 10, 11 \})'$
 $= \{ 3, 5, 9, 12, 13, 14, 15 \}$

Jun 18-11:36 AM

\in element of
 \notin not an element of

$A = \{ 1, 2, 3, 4 \}$
 $3 \in A$ true
 $5 \notin A$ true

$A' = \{ 5, 6 \}$
 $5 \in A'$

Jun 18-12:02 PM

De Morgan's Laws

① $(A \cup B)' = A' \cap B'$

② $(A \cap B)' = A' \cup B'$

For Monday show ②

Jun 18-12:07 PM

$(A \cup B)' = A' \cap B'$
 Show this!

a) $A = \{ x_2, x_3, x_4, x_5, x_6 \}$
 $B = \{ x_3, x_4, x_6, x_7 \}$

b) $(A \cup B)' = \{ x_1, x_8 \}$

c) $A' = \{ x_1, x_7, x_8 \}$

d) $B' = \{ x_1, x_2, x_5, x_8 \}$

e) $(A \cap B)' = \{ x_1, x_8 \}$

Jun 18-12:12 PM

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1, 2, 5, 6, 8, 9, 10, 12, 15, 16,

17, 18, 24, 31, 32, 35, 41,

42, 43, 49, 52

* Exam #1 - Thursday
Chapter 1 & 2

Jun 18-12:25 PM