# Programming Assignment

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## complement_of_union

1/1 point (graded)

Define $A$, $B$, and $U$ as follows:

$A = \{-6, 3, 4, 5\}$

$B = \{-6, 5, 13\}$

$U = A|B|\{12, -2, -4\}$

Which of the following is the correct output for `complement_of_union(A, B, U)`

- $\{-6, -2, 3, 4, 13\}, \{-6, -2, 4, 12\}$
- $\{-4, -2\}\{-6, -4, 3, 5, 13\}$
- $\{-6, 3, 4, 5, 13\}, \{-4, -2, 12\}$ ✔

Submit You have used 1 of 2 attempts

✔ Correct (1/1 point)

## intersection_of_complements

1/1 point (graded)

Like before, define $A$, $B$, and $U$ as follows:

$$A = \{-6, 3, 4, 5\}$$

$$B = \{-6, 5, 13\}$$

$$U = A|B|\{12, -2, -4\}$$

Which of the following is the correct output for `intersection_of_complements(A, B, U)`

- $\{-6, -2, 3, 4, 13\}, \{-4, -2, 12, 13\}$
- $\{-4, -2, 12, 13\}, \{-4, -2, 12\}$ ✔
- $\{-4, -2, 12\}, \{-4, -2, 12, 13\}$

Submit You have used 1 of 2 attempts

✔ Correct (1/1 point)

## product_of_unions

1/1 point (graded)

Define $A$, $B$, $S$, and $T$ as follows:

$A = \{5\}$

$B = \{5\}$

$S = \{-1, 0\}$

$T = \{0\}$

Which of the following is the correct output for `product_of_unions(A, B, S, T)`

- $\{5\}, \{(5, -1), (5, 0)\}$ ✔
- $(\{5, -1\}, \{5, 0\}), \{5\}$
- $\{5\}, (\{5, -1\}, \{5, 0\})$

Submit You have used 1 of 2 attempts

✔ Correct (1/1 point)

## union_of_products

1/1 point (graded)

Again, define $A$, $B$, $S$, and $T$ as follows:

$A = \{5\}$

$B = \{5\}$

$S = \{-1, 0\}$

$T = \{0\}$

Which of the following is the correct output for `union_of_products(A, B, S, T)`

- ◉ $\{(5, -1), (5, 0)\}, \{(5, -1), (5, 0)\}$ ✔
- ○ $\{5, -1\}, \{5, 0\}$
- ○ $(5, -1), (5, 0)$

Submit You have used 1 of 2 attempts

✔ Correct (1/1 point)

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