

ExampleFind $A \cup B \cap C$

Let $U = \{m, a, v, e, r, i, c, k\}$, $A = \{r, i, c, k\}$ $B = \{v, e, r, i\}$ and we'll make a third set C . $C = \{m, i, r, e\}$

Well, just like in arithmetic, when we don't have parentheses we work from left to right. So, let's find $A \cup B$.

$$A \cup B = \{r, i, c, k, v, e\}$$

Now let's intersect that with C .

$$\{r, i, c, k, v, e\} \cap \{m, i, r, e\} = \{r, i, e\}, \text{ therefore}$$

$$A \cup B \cap C = \{r, i, e\}$$

That could have been written with parenthesis; $(A \cup B) \cap C$