Universal set - the set of all students at IU

B - set of business maj. at IU
O - set of out of state students at IU

Ex1: out of state AND business

\( B \cap O \)

\( \cap \) means the word and
Ex 2: 

- Out of state OR business
- Just have to satisfy one
- Both B and O
- No business
- Don't live out of state
- Major in B but not O

Ex 3: 

- The set of students who don't want to major in business and don't live out of state (see * in Ex 2)

Notice Ex 2 is exactly opp. of Ex 3. 

\[ \text{called complements} \]