

## Set Union

Other things that happen in our life might be described as the set union. Going back to the two sets, C is the set of kids taking calculus, P is the set taking physics. If we would like to contact students taking calculus or physics, then we would be talking about the set union. That's the kids taking calculus or physics or both calculus and physics..

$$C \cup P = \{x / x \in C \text{ or } x \in P\}$$

The key word in the definition is *or*. In math, *or* means “one or the other or both”. That's called the inclusive *or*. Many of us use the exclusive *or* at home, which means to say one or the other but not both. So *or* in math is used differently than the *or* at home.