

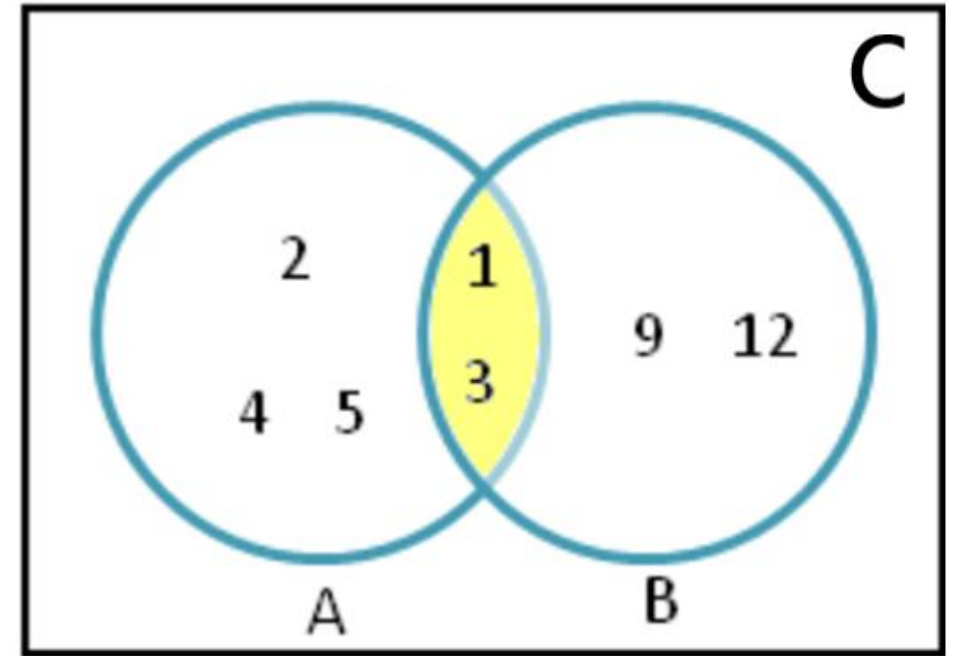
Thursday May 27, 2021 Activator

What region do the numbers {1,2,3,4,5} represent? **A**

What region do the numbers {1,3,9,12} represent? **B**

What region do the numbers {9,12} represent? **Not A**

What region do the numbers {2,4,5} represent? **Not B**



A region is marked by each circle.

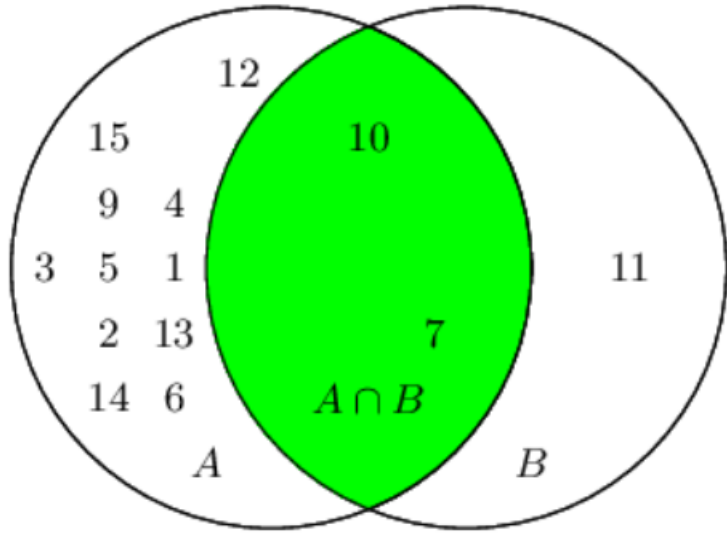
Today's Objective

Unit 3 Lesson 3

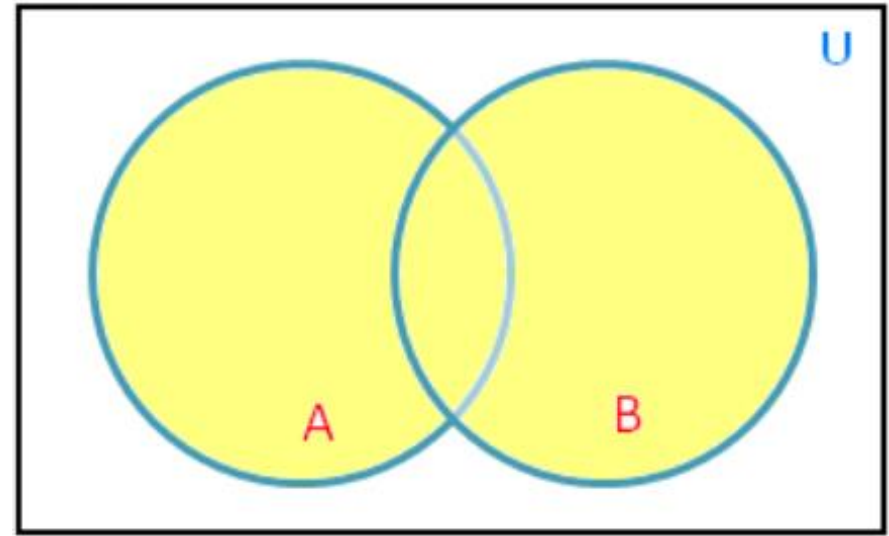
Students will be able to calculate probability with unions (u) and intersections (n).



Unit 3.3 Real Life Pictures



A and B



A or B



Definition

The intersection of A and B is when A and B are the same (or agree).

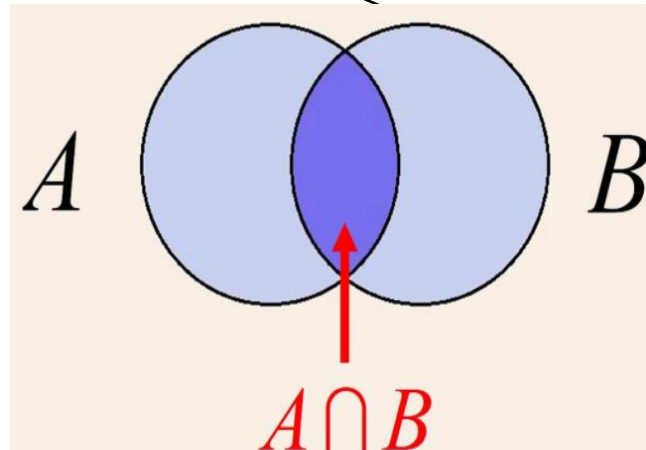
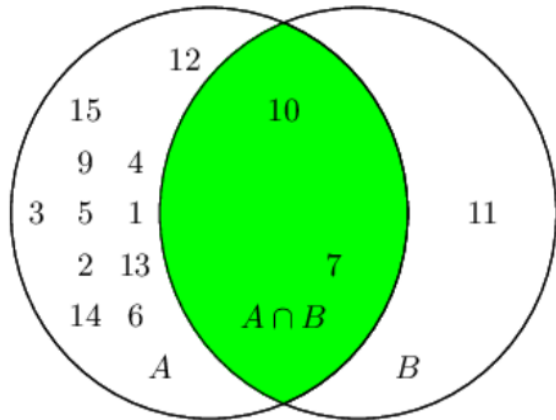
Facts

(1 of 4)

To be in **A and B**,
Something in A must also be in B.
Something in B must also be in A.

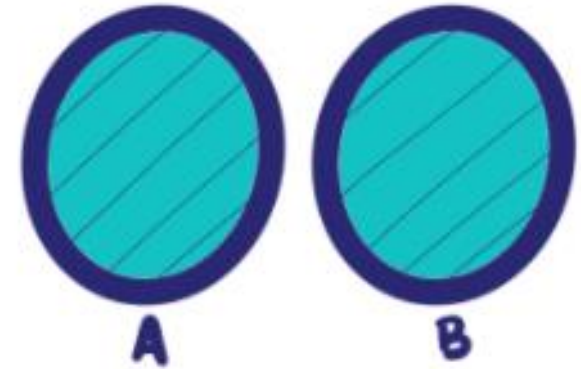
Intersection
(and) $A \cap B$

Example(s)



Non-Example(s)

Nothing here
is in A and B.



Today's New Vocab (2 of 4)

What is A? $\{3, 6, 9, 12, 15, 18\}$

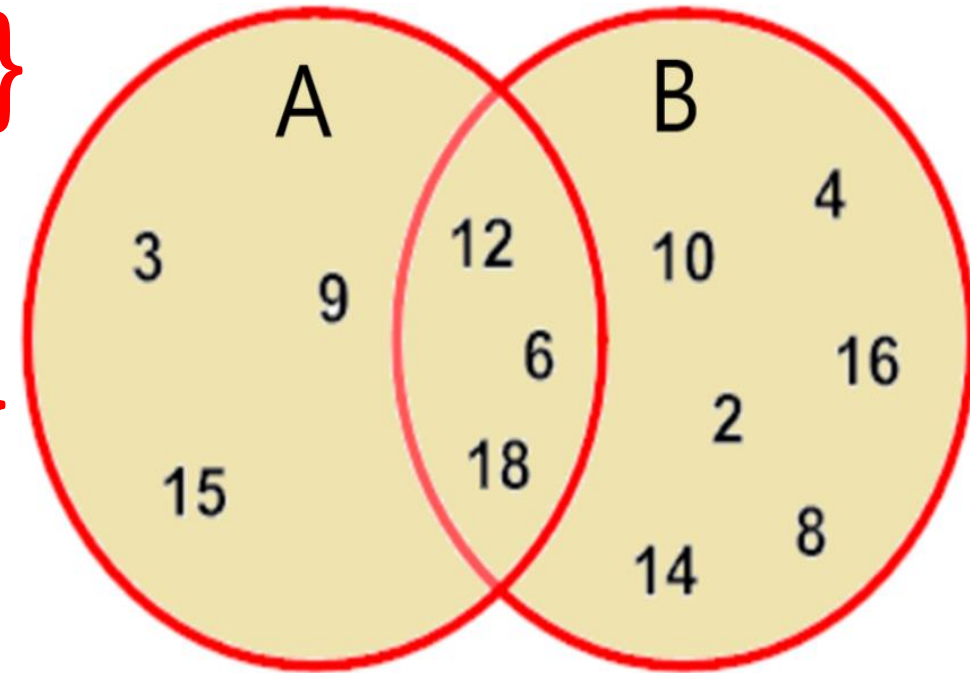
What is B?

$\{2, 4, 6, 8, 10, 12, 14, 16, 18\}$

What is $A \cap B$? $\{6, 12, 18\}$

What is Not A? $\{2, 4, 8, 10, 14, 16\}$

What is Not B? $\{3, 9, 15\}$



Definition

A or B is called the Union. It is when one of the two options are met.

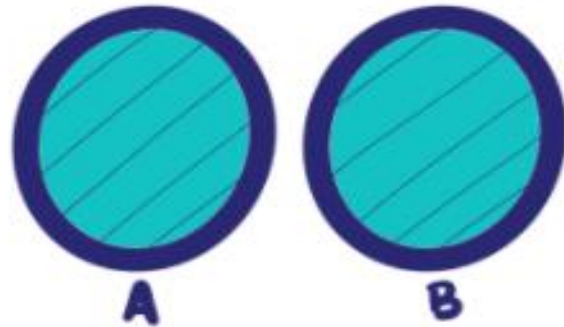
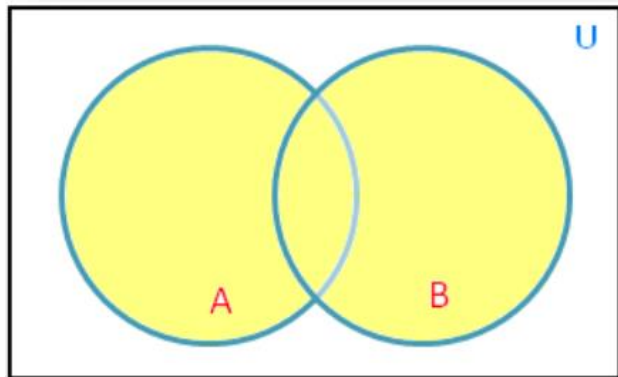
Facts

(3 of 4)

Either A or B must be satisfied. The intersection also meets this requirement.

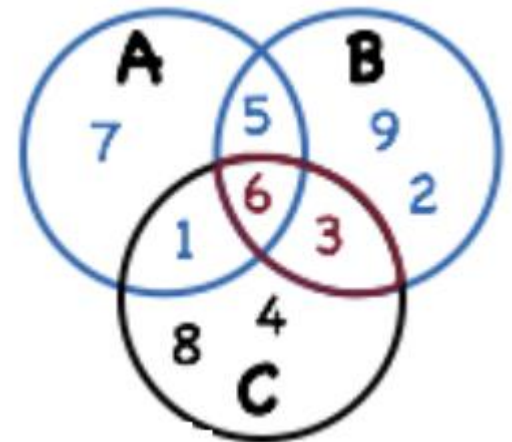
Union (or)
 $A \cup B$

Example(s)



Non-Example(s)

The number 4 is **NOT** in A or B.



Today's (4 of 4)

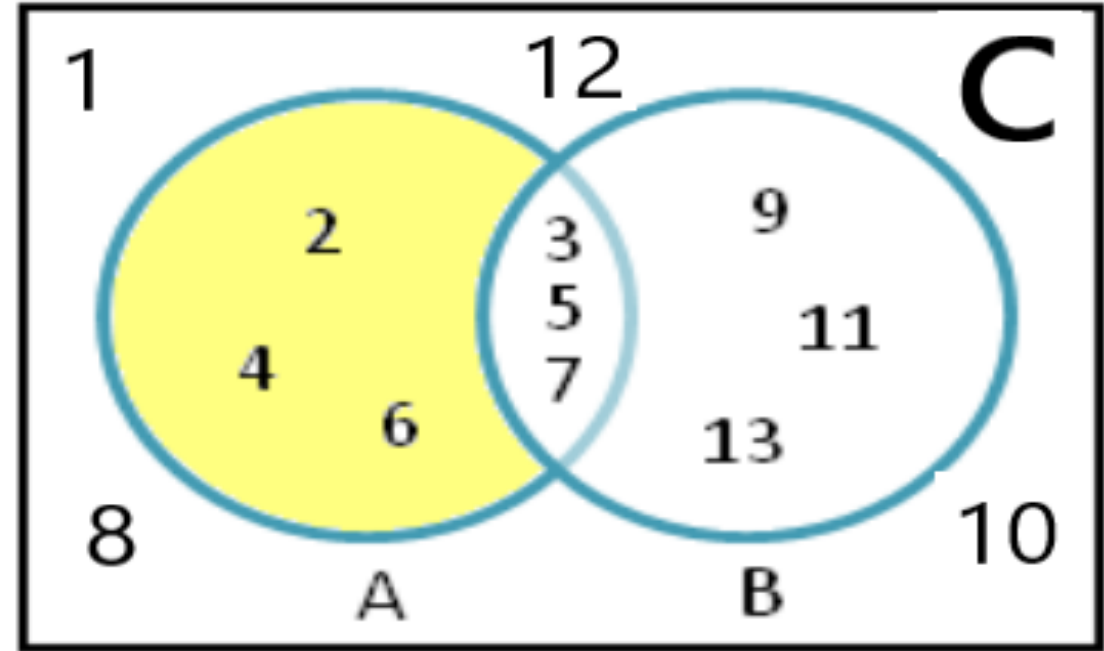
The Union (A or B) = $A \cup B$

Is the number 12 in $A \cup B$? **No**

Is the number 4 in $A \cup B$? **Yes**

Is the number 11 in $A \cup B$? **Yes**

Is the number 5 in $A \cup B$? **Yes**



The Intersection (A and B) = $A \cap B$

Is the number 12 in $A \cap B$? **No**

Is the number 4 in $A \cap B$? **No**

Is the number

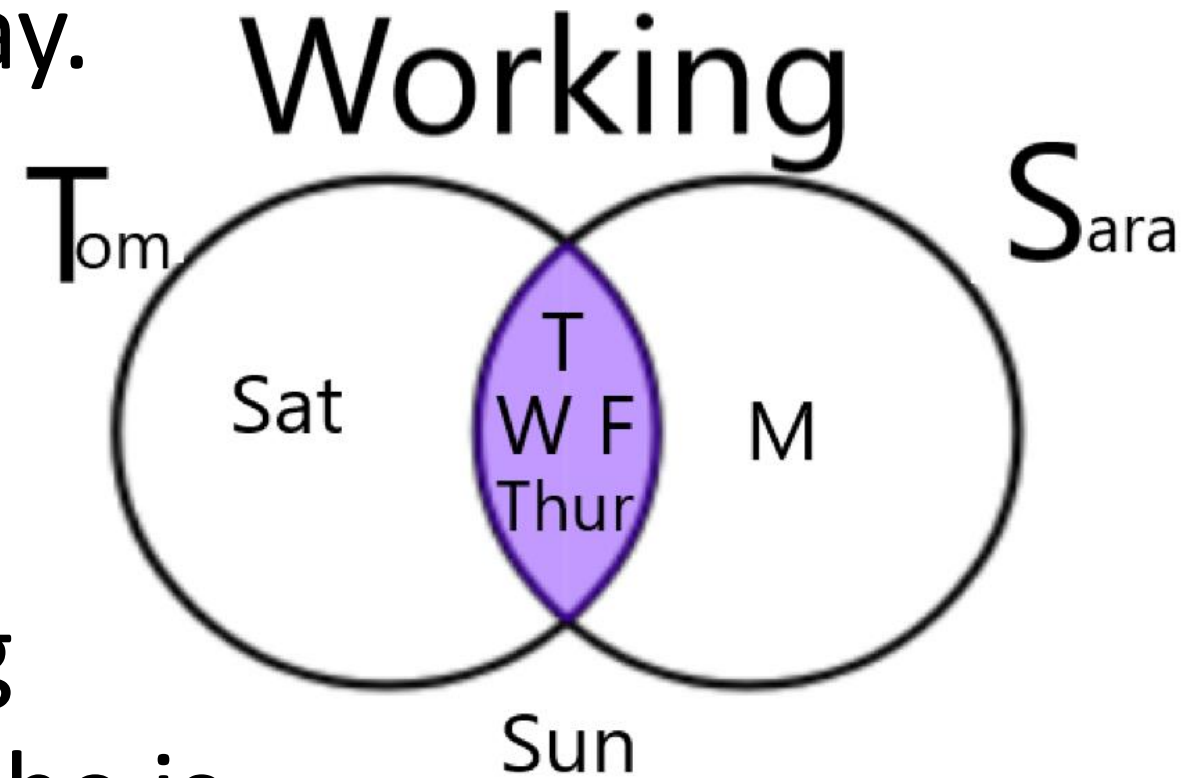
5 in $A \cap B$? **Yes**

Thursday May 27, 2021 Work Period

Tom works Tuesday-Saturday.

Sara works Monday-Friday.

Draw a Picture.



Sara wants to do something when Tom is working, and she is not. What day is best? **Saturday**

Why? **It is the only possible day.**

Thursday May 27, 2021 Exit Ticket

Page #12
Lesson 3.3

Tom works Tuesday-Saturday.

Sara works Monday-Friday.

Draw a picture for their
OFF Work.

If Tom and Sara want to
do something together,
what day is best? **Sunday.**
Why? **They both have off.**

