Today's Plan:

Learning Target (standard): I will describe the union and intersection of sets using the roster method & set builder notation.

Students will: Complete practice problems over previous concepts at the boards, put up homework problems on the board and make necessary corrections to their own work, take notes over new material and complete practice problems over new concepts.

Teacher will: Provide practice problems over previous concepts, check homework problems for accuracy and provide students feedback, describe and provide examples of new concepts and assign students assessment problems over new concepts.

Assessment: Board work, homework check and homework assignment

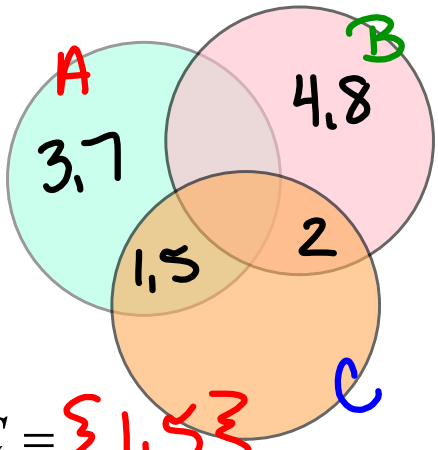
Differentiation: Students will work at the board, go over and correct homework at their seats, actively engage in lecture over new concepts, practice new concepts with the aid of other students and the teacher and complete homework assignment.

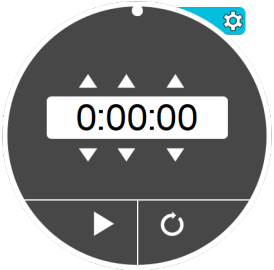
Bell Ringer:

$A = \{1, 3, 5, 7\}$

$B = \{2, 4, 8\}$

$C = \{1, 2, 5\}$





$A \cap C = \{1, 5\}$

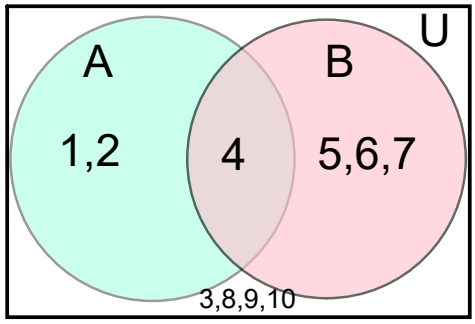
$A \cap B \cap C = \emptyset$

"empty set"

$A \cup B = \{1, 2, 3, 4, 5, 7, 8\}$

$A \cup B \cup C = \{1, 2, 3, 4, 5, 7, 8\}$

Venn Diagrams: #1-10



1) $A = \{1,2,4\}$

2) $B = \{4,5,6,7\}$

3) $U = \{1,2,3,4,5,6,7,8,9,10\}$

4) $A \cup B = \{1,2,4,5,6,7\}$

5) $A \cap B = \{4\}$

6) $A - B = \{1,2\}$

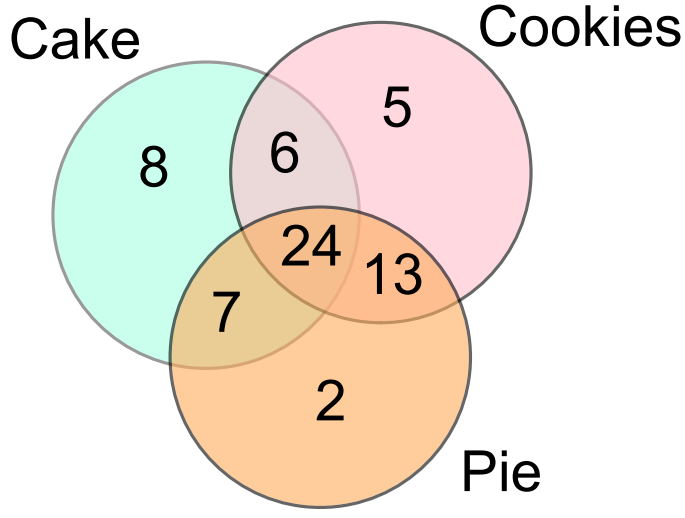
7) $B - A = \{5,6,7\}$

8) $\overline{A}$ = "not in A"
$\{3,5,6,7,8,9,10\}$

9) $\overline{B} = \{1,2,3,8,9,10\}$

10) $\overline{A \cup B} = \{3,8,9,10\}$

Venn Diagrams: #11-16

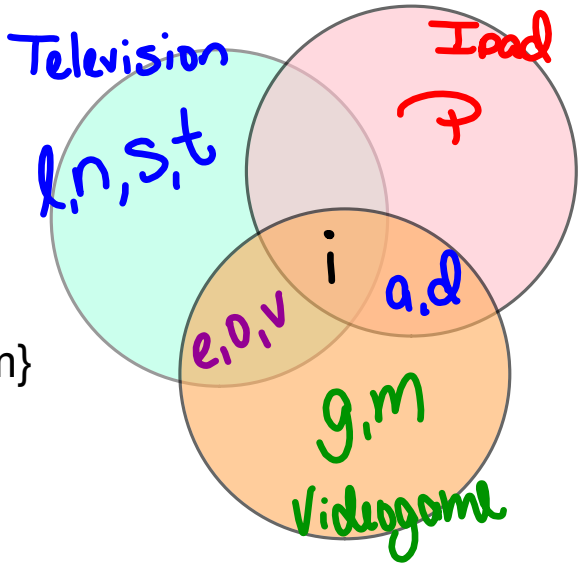


Venn Diagrams:

TELEVISION = {t,e,l,v,i,s,o,n}

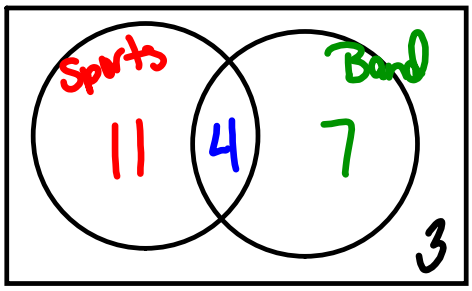
IPAD = {i,p,a,d}

VIDEOGAME = {v,i,d,e,o,g,a,m}



Use a Venn diagram to solve the dilemma.

In a class of 25 students, 15 play sports, 11 are in band and 4 play sports and are in band. How many students in the class neither play sports or are not in the band?



Assignment:

Problem Solving with Venn Diagrams

#1-6