

Be sure your textbook is in class with you.

On last night's Hw

Give yourself a score and check it with the purple solutions.

VENN DIAGRAMS



Target

Analyze
Venn Diagrams

That cast is super trendy.

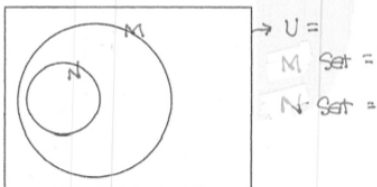
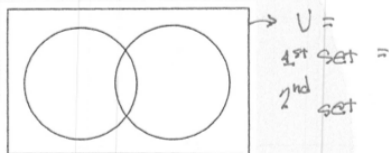
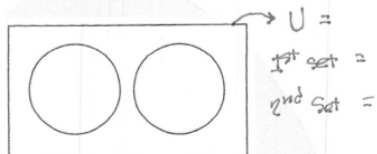
Posted on November 28, 2006 by Jessica Hagy



Pick up
the
classwork

Venn Diagrams

1. Consider and suggest what the sets could be in the reference also to what the universal set might be.

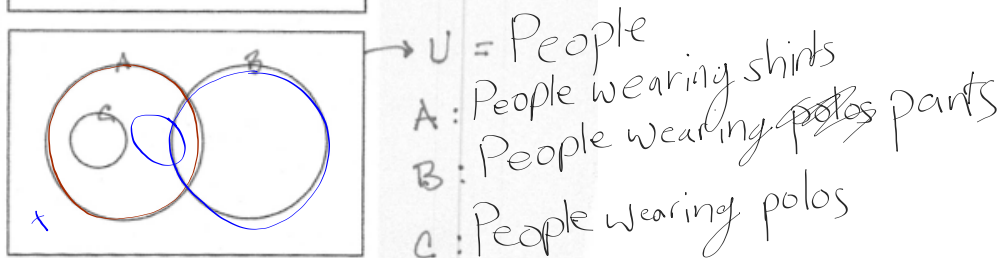
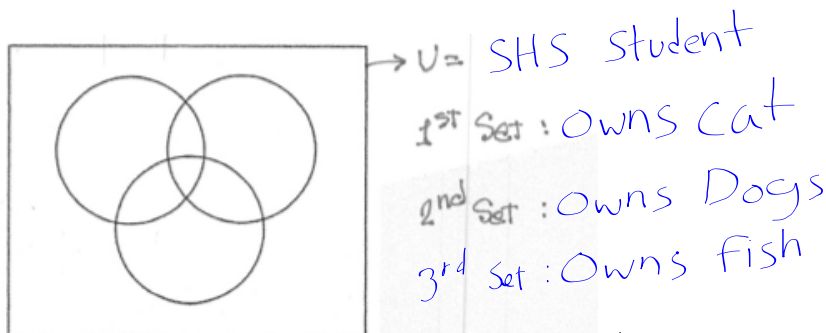
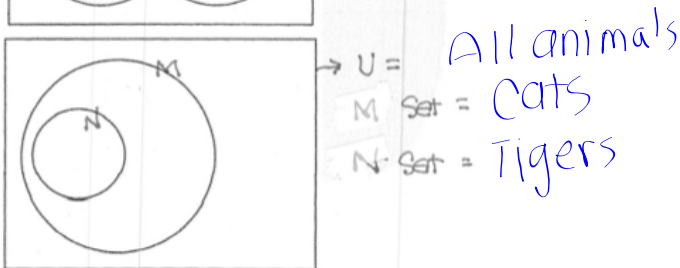
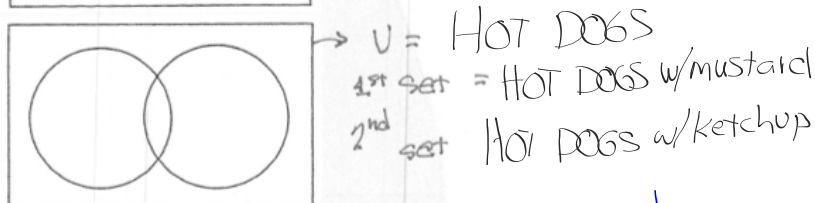
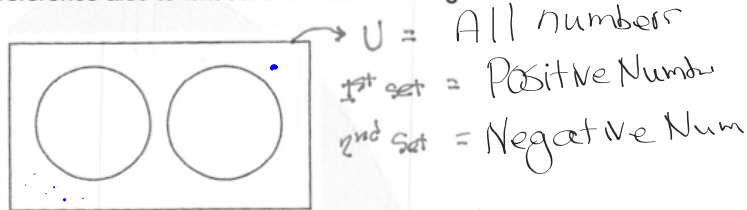


As a group, create sets that match the Venn Diagram

do first side only

Venn Diagrams

1. Consider and suggest what the sets could be in the reference also to what the universal set might be.



read about

Venn Diagrams, etc

pp. 73-74

Do #2 on page 75

(on the bottom of your first sheet)

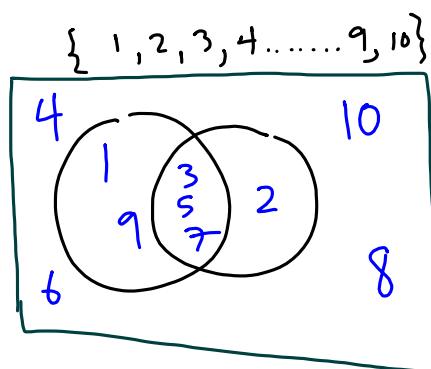
a) $A = \{1, 3, 5, 7, 9\}$

$B = \{2, 3, 5, 7\}$

b) $A \cap B = \{3, 5, 7\}$

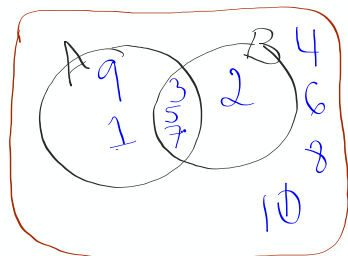
$A \cup B = \{1, 2, 3, 5, 7, 9\}$

(c)



$$U = \{x \mid x \in \mathbb{Z}, 1 \leq x \leq 10\}$$

$$A = \{\text{odd \#s} < 10\} \quad B = \{\text{Primes} < 10\}$$

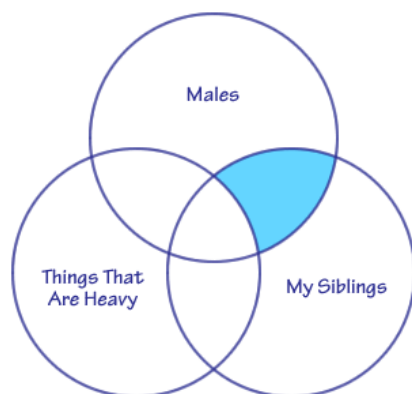


a) $A = \{1, 3, 5, 7, 9\}$
 $B = \{2, 3, 5, 7\}$

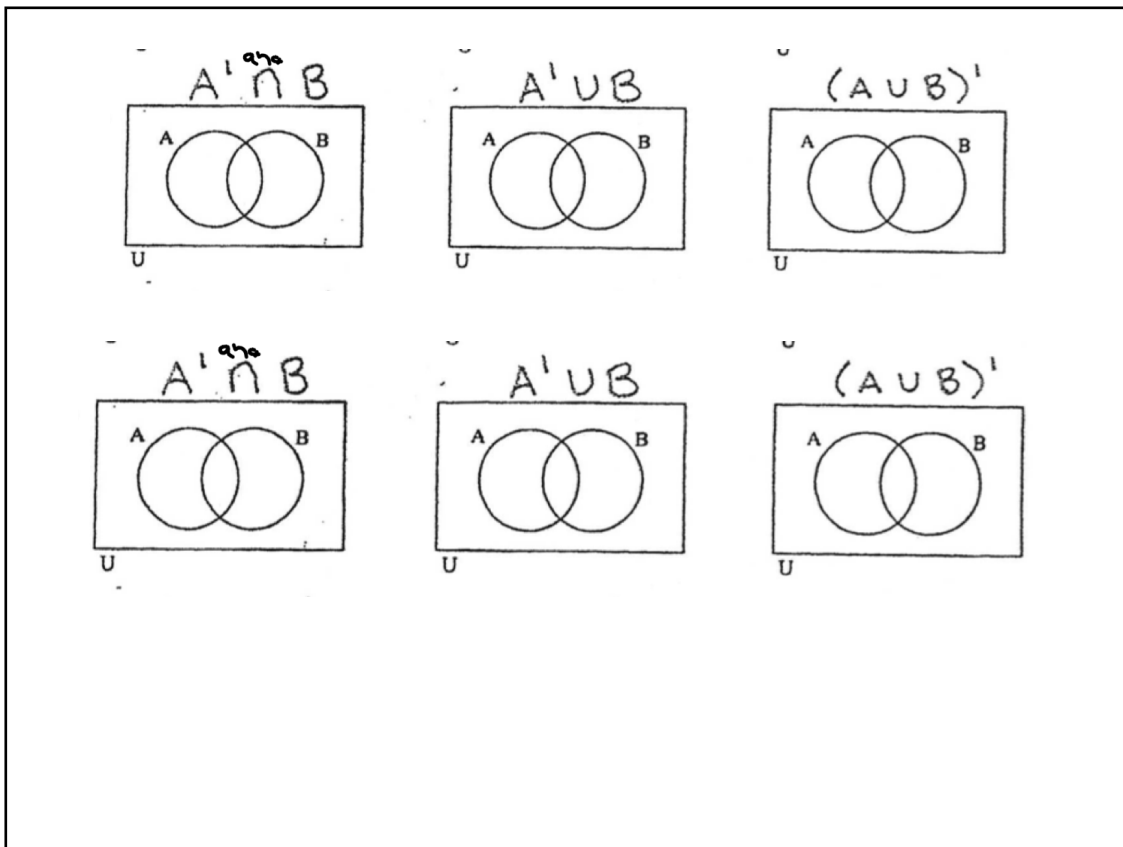
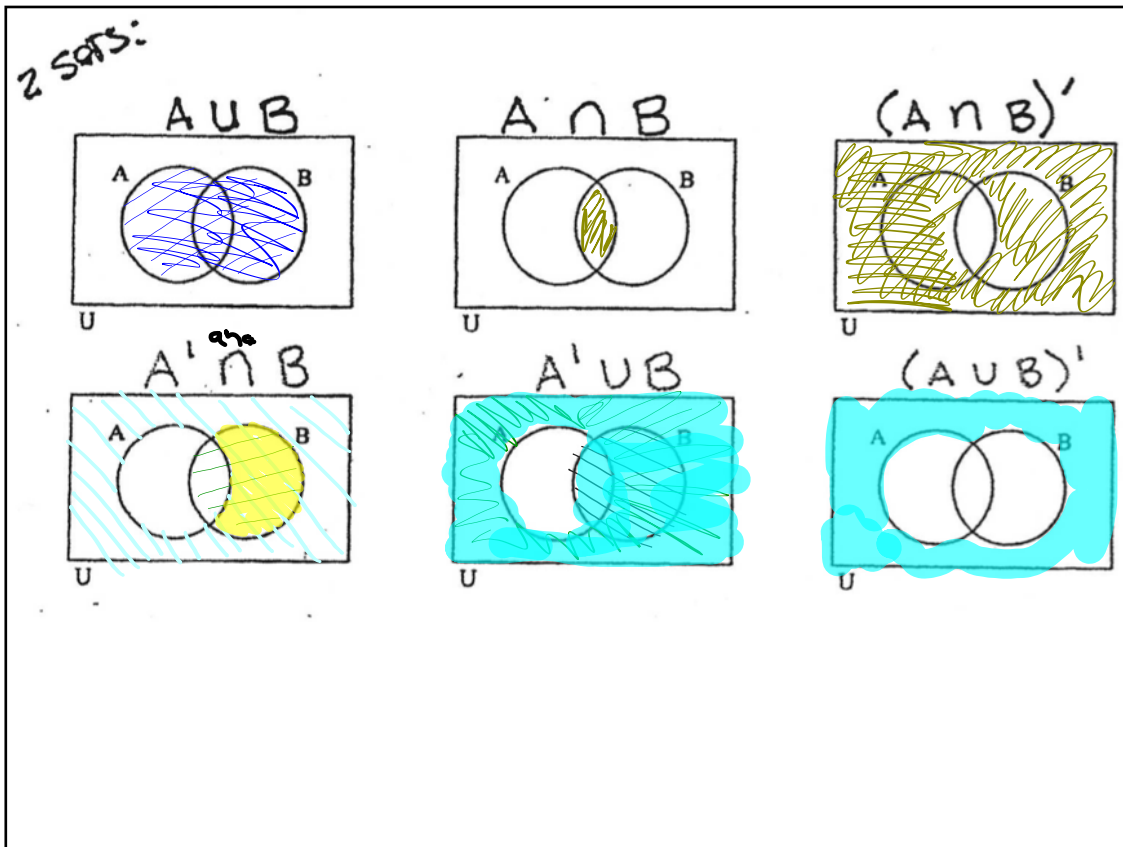
b) $A \cap B = \{3, 5, 7\}$
 $A \cup B = \{1, 2, 3, 5, 7, 9\}$

c) ←

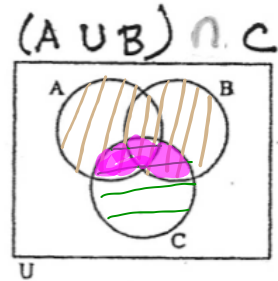
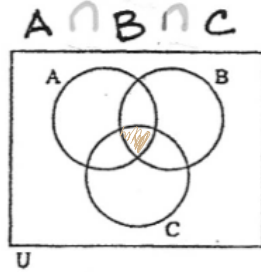
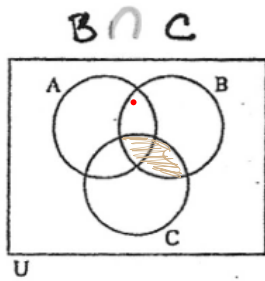
Shading of Venn Diagrams



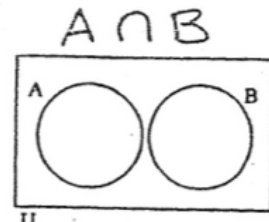
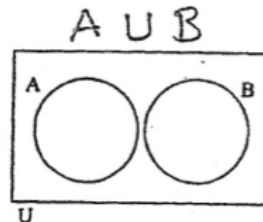
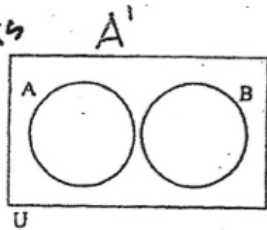
do #3 on the hand out

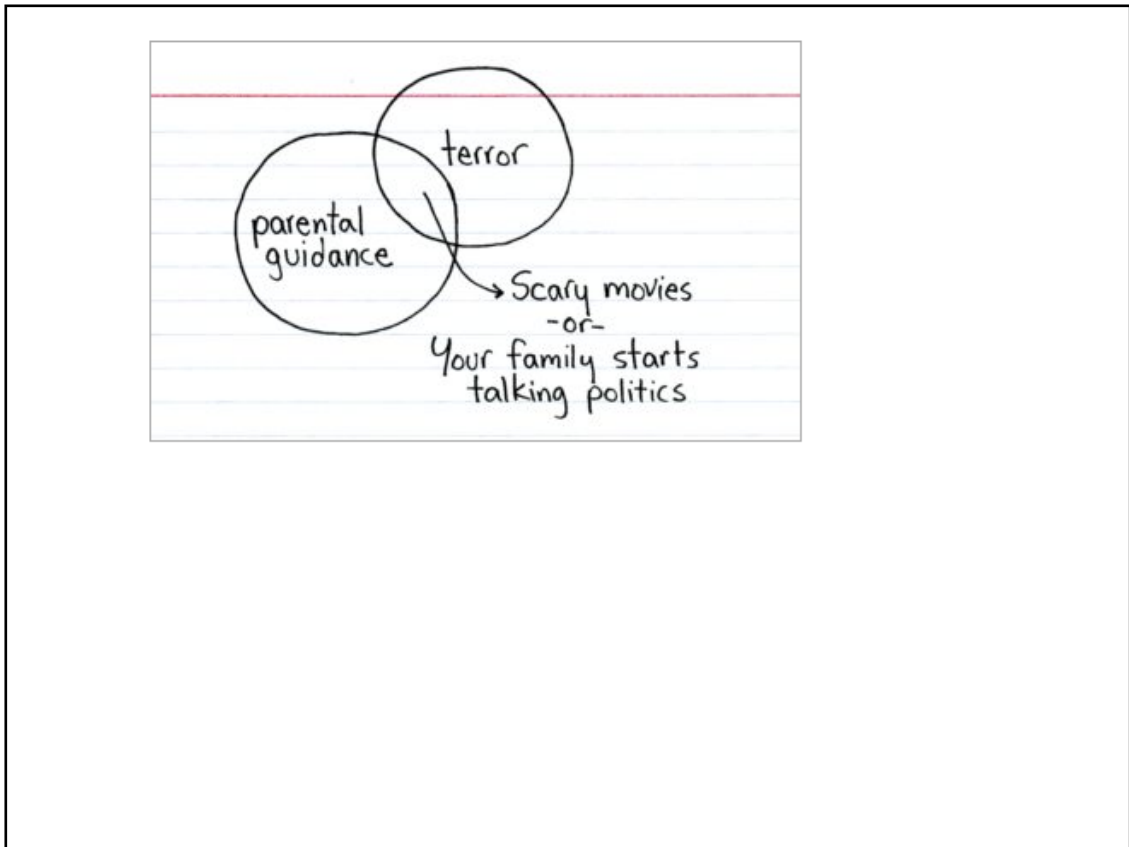
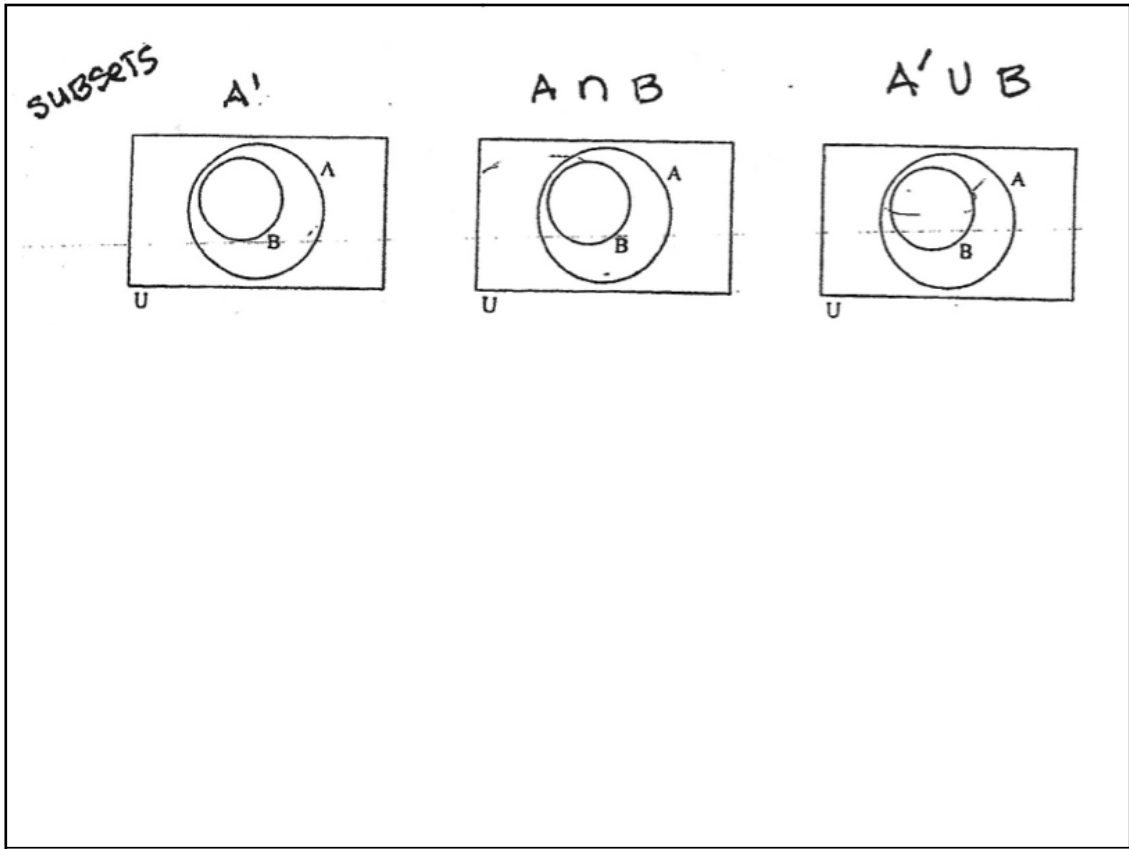


3 SETS:



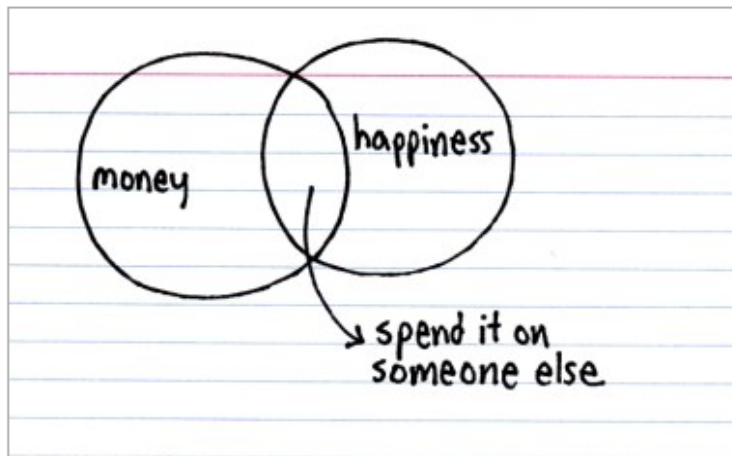
2 D
SETS





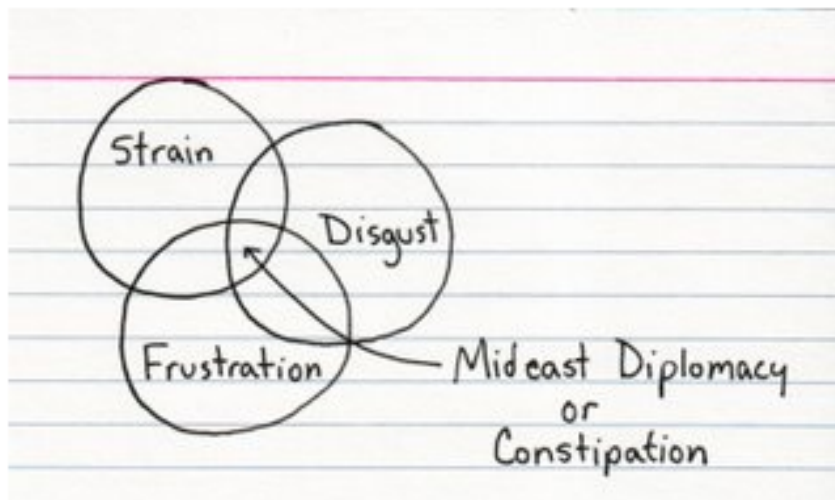
Behavioral economics.

Posted on February 25, 2016 by Jessica Hagy



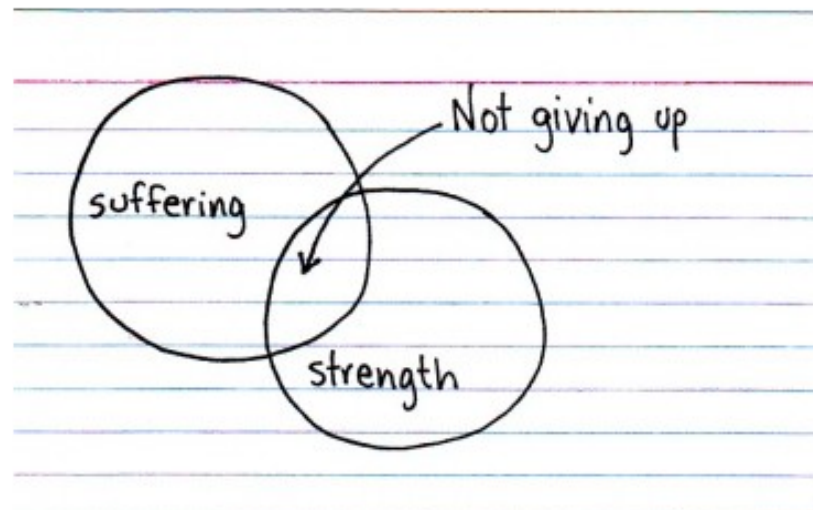
Something has to give.

Posted on August 31, 2006 by Jessica Hagy



How to win.

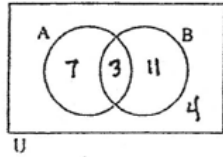
Posted on May 20, 2011 by Jessica Hagy



Numbers in Venn Diagrams

handout : page 4

Numbers in Regions



If 3 means that there are 3 elements in the set $A \cap B$, how many elements are there in:

- a) A $7 + 3 = 10$
- b) B' $7 + 4 = 11$
- c) $A \cup B$ $7 + 3 + 11 = 21$
- d) A but not B 7
- e) B, but not A 11
- f) neither A nor B 4

5.

Given $n(U) = 30$ $n(A) = 16$ $n(B) = 18$

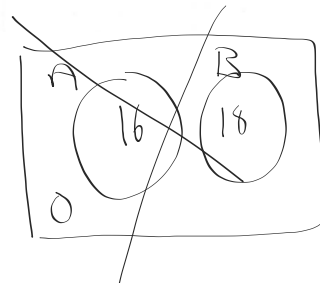
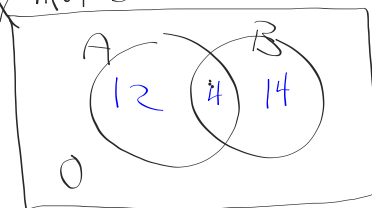
$n[(A \cup B)'] = 0$

$n(A \cap B) = 4$

$30 = 16 + 18 - x$ $n(U) = 30$

$30 = 34 - x$

$x = 4$



Important Union Property

$$n(A \cup B) = n(A) + n(B) - n(A \cap B)$$

The diagram consists of four square boxes arranged in a row, separated by mathematical symbols. The first box contains two overlapping circles, A and B, with their intersection shaded with diagonal lines. This is followed by an equals sign, then a second box with circle A shaded, a plus sign, a third box with circle B shaded, a minus sign, and a fourth box with the intersection of A and B shaded.

Given $n(U) = 30$ $n(A) = 14$ $n(B) = 17$
 $n(A \cap B) = 6$

find $n(A \cup B) = 8 + 6 + 11 = 25$

find $n(A, \text{ but not } B) = 8$

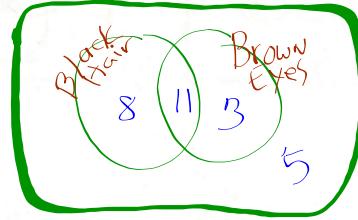
The diagram shows two overlapping circles, A and B, inside a rounded rectangular boundary. The region of circle A that does not overlap with circle B is labeled with the number 8. The overlapping region between A and B is labeled with the number 6. The region of circle B that does not overlap with circle A is labeled with the number 11. The region outside both circles, within the rounded rectangle, is labeled with the number 5. Above the rounded rectangle, the text $n(U) = 30$ is written.

c) A tennis team has 27 members, 19 have black hair, 14 have brown eyes and 11 have both black and brown eyes.

a) Create a Venn Diagram with this information.

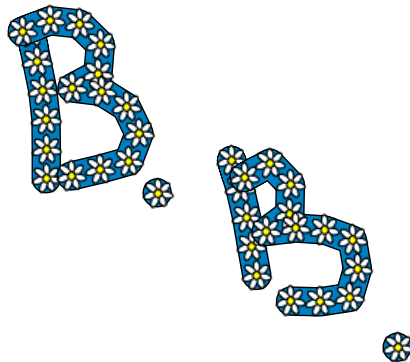
$$n(A \cup B) = n(A) + n(B) - n(A \cap B)$$

$$\begin{aligned} \text{⊖} &= \text{⊖} + \text{⊖} - \text{⊖} \\ &= 19 + 14 - 11 \end{aligned}$$



b) Find the number of members with : 22
black hair or brown eyes

black hair, but not brown eyes. 8



see
Test

Assignment:

is a handout called "Assignment 3"

--you have 2 days to complete it.