Worksheet from Sept. 7

1a) not empty

b) $\emptyset$

c) not empty

d) not empty

e) $\emptyset$

2. $A = \{a, c, d, e\}$

$B = \{b, c, e, f, g\}$

$A - B = \{a, d\}$

3. $n(A) = 10$

$\{-3, -2, -1, 0, 1, 2, 3, 4, 5, 6\}$

4a) $S \subset T$ (all elements of S in T ?) $\Rightarrow$ NO, 4 is not in T

b) $T \subset R$? $\Rightarrow$ yes, all elements of T are in R

5. A and B

A and C

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

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

$B = \{2, 4, 6\}$

a) $A' = \{2, 4, 6, 8\}$

b) $A \cup B = \{1, 2, 3, 4, 5, 6, 7, 9\}$ (all elements)

c) $A \cap B = \emptyset$ (intersect, in both)

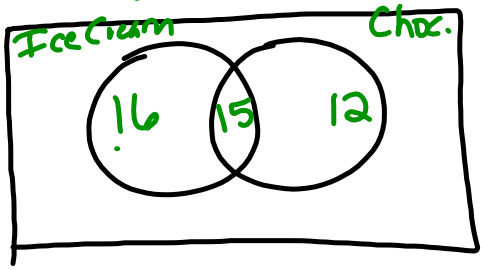
7. $U = \{1, 2, 4, 5, a, b, c, d\}$

$A' = \{b, c, 4\}$

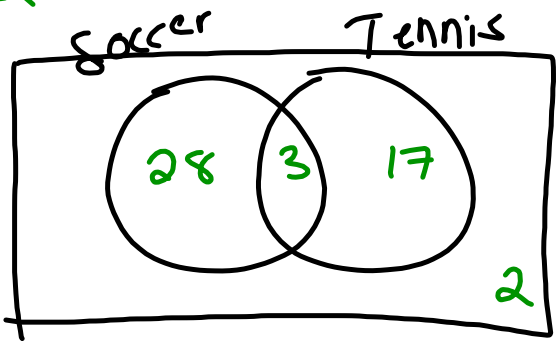
1.2/1.3 Two-Venn Diagrams

Sept. 11

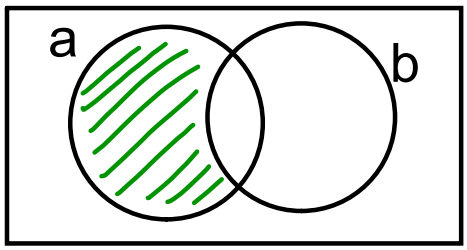
worksheet



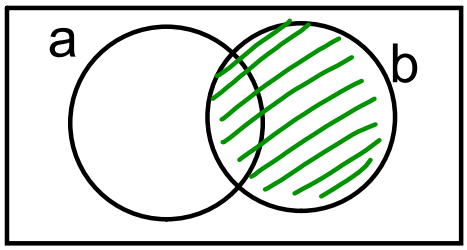
1. 31
2. 27
3. 15
4. 16
5. 12



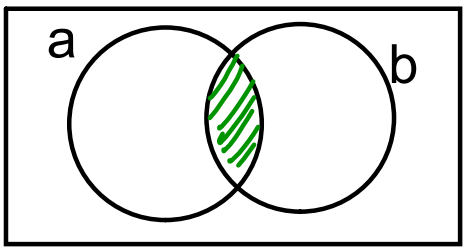
1. 31
2. 20
3. 3
4. 28
5. 17
6. 2



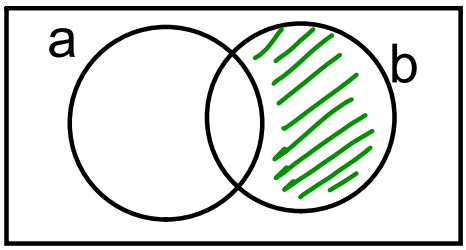
$A - B$
or
$A \setminus B$



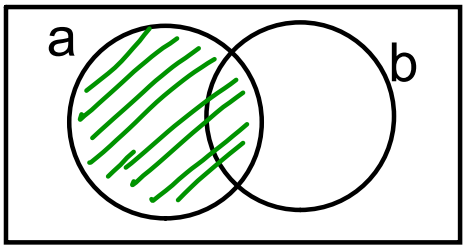
B



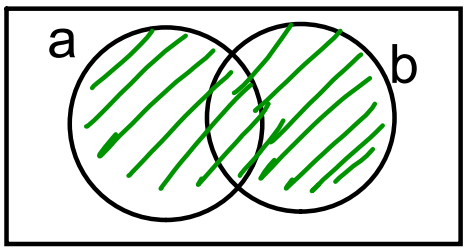
$A \cap B$



$B - A$
or
$B \setminus A$

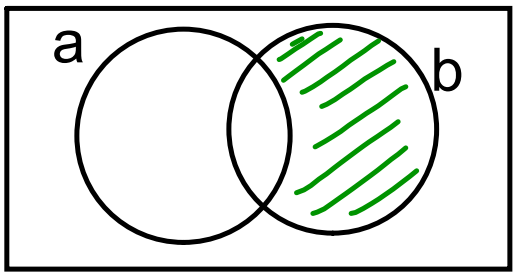


A

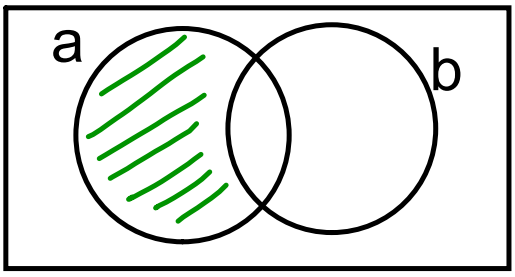


$A \cup B$

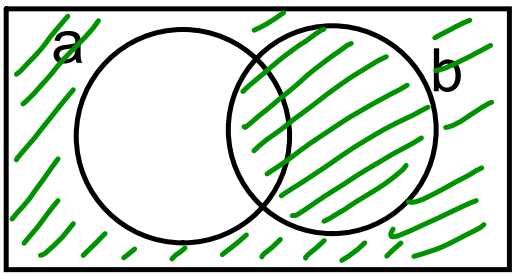
A' 



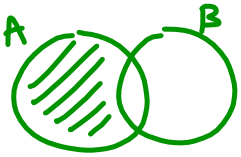
$A' \cap B$

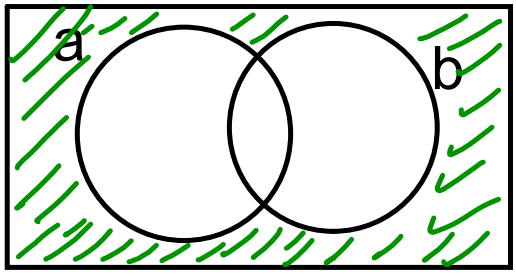


$A \cap B'$



$(A - B)'$

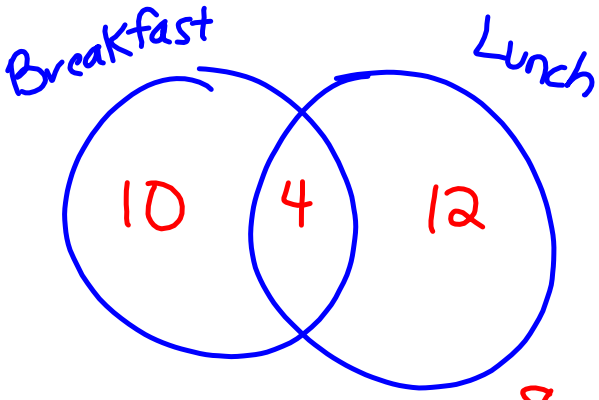
Think: 



$(A \cup B)'$

Sample Question

There are 34 students
14 eat breakfast
16 eat lunch
4 eat breakfast + lunch
How many don't eat either?



8 → eat neither