

Mr. B-B

grades
total
points

- HW quizzes
- quizzes
- tests
- project

Phone rule

No phone out during
instruction or classwork

p. 62 Skills Checks #1

$$\textcircled{d} 1 - \left(\frac{1}{3} \times \frac{5}{9} \right)$$

$$= 1 - \frac{5}{27} = \frac{27}{27} - \frac{5}{27}$$

$$= \frac{22}{27}$$

$$\textcircled{e} \frac{\frac{3}{\cancel{20}}}{\frac{1}{\cancel{20}}} = \frac{3}{7}$$

Venn Diagrams

EX. In an IB program there are

23 HL math students

27 HL science students

25 HL art students

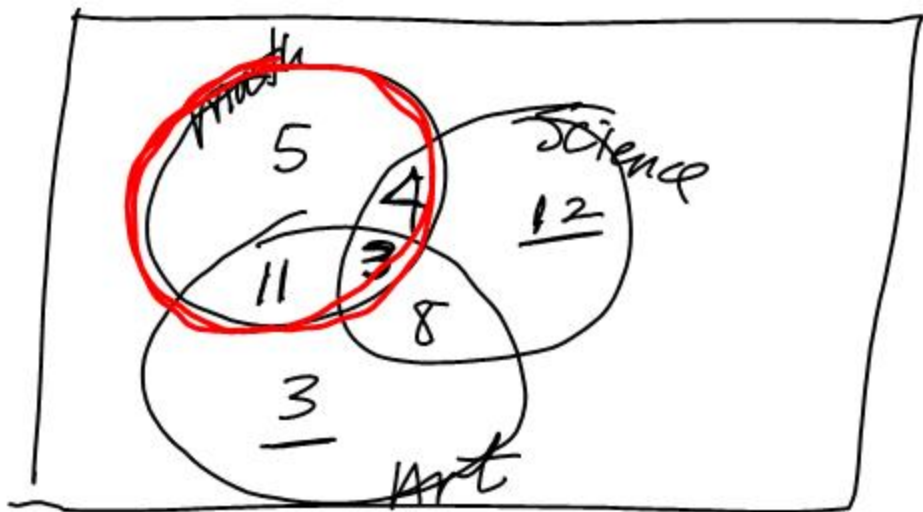
7 students are in Math + science

11 students are in Science + art

14 students are in math + art

3 students are in all 3

- How many students are only in HL math?
- How many students are there all together?



- c) A student is chosen at random.
Find the probability that the student takes HL art.

$$\frac{25}{46}$$

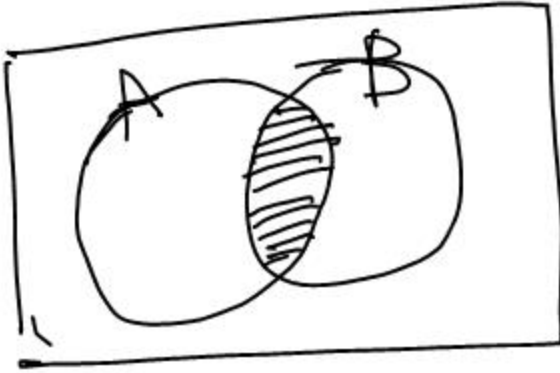
$$0 \leq \text{probability} \leq 1$$

- d) A student is chosen at random. Find the probability that the student takes art given that he or she takes math.

$$\frac{14 \text{ art students}}{23 \text{ math students}} \quad \frac{14}{23}$$

Conditional Probability

Set Notation

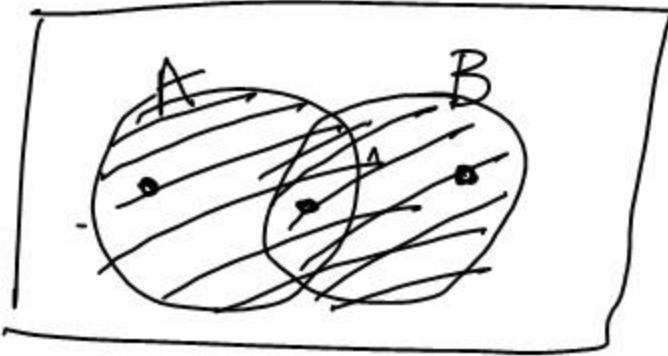


The intersection of
A and B

A

$$A \cap B$$

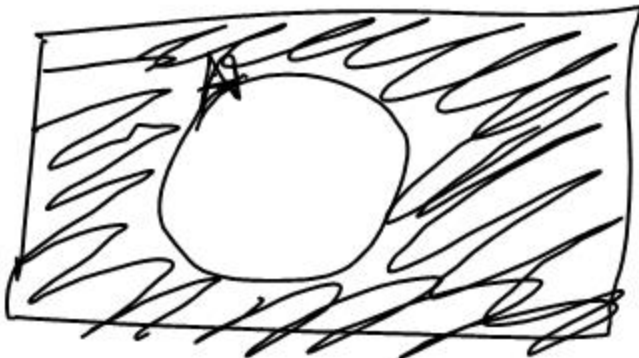
A and B



The union of
A and B

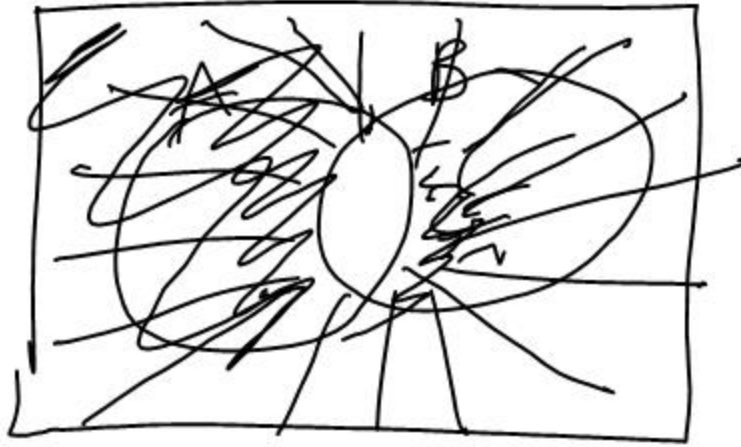
$$A \cup B$$

A or B

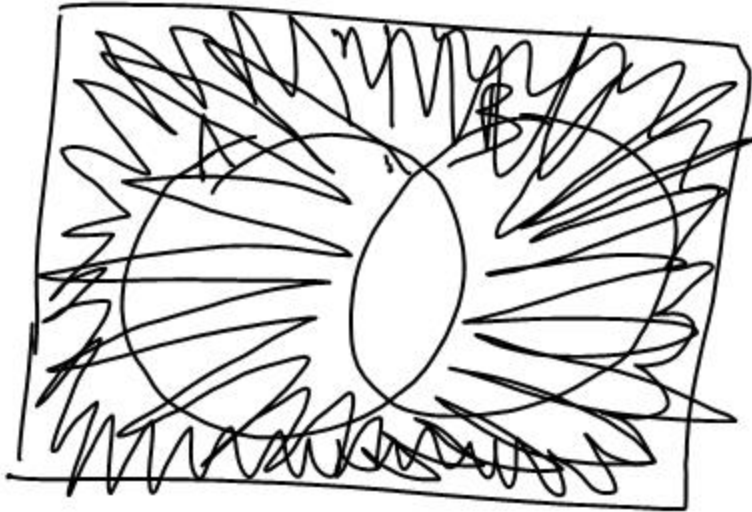


A'
not A

Ex.



shade: $(A \cap B)'$



shade: $A' \cup B'$

$$(A \cap B)' = A' \cup B'$$

De Morgan's
Law