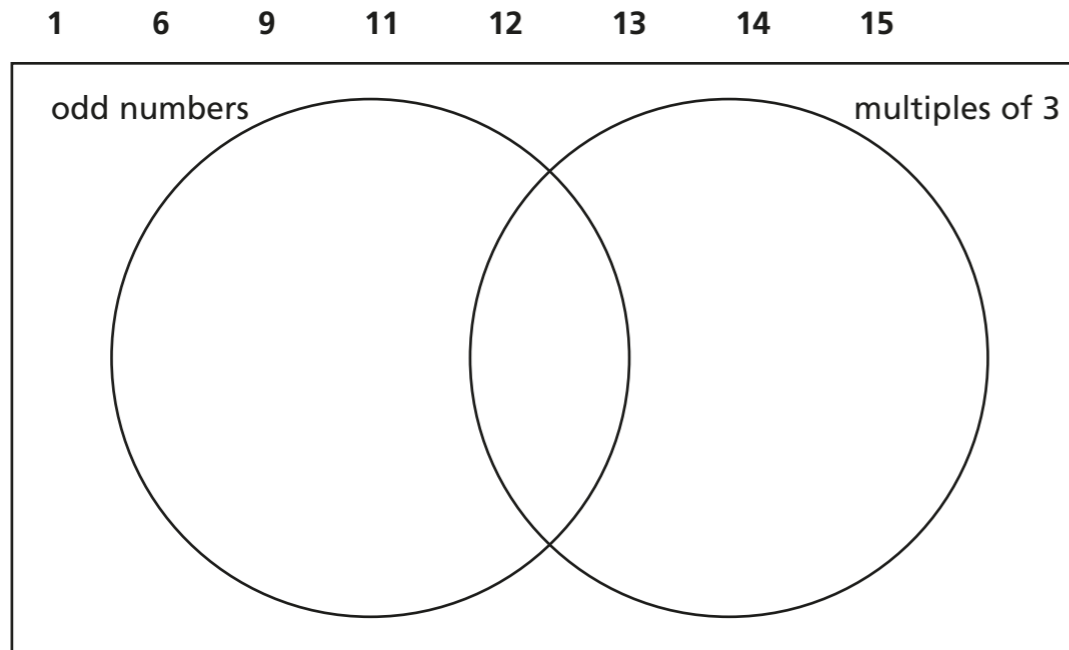


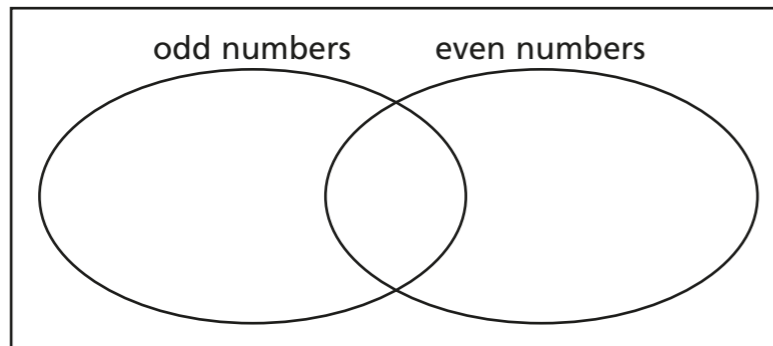
Find probabilities from Venn diagrams

1 a) Write these numbers on the Venn diagram.



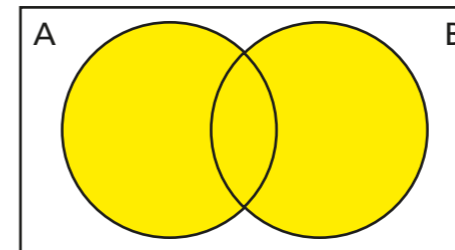
- b) Where did you put the number 14? Why?
- c) Write one more number in each of the sections.

2 Aisha has drawn this Venn diagram.

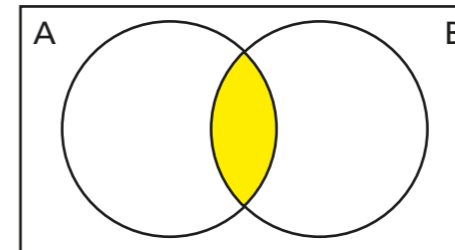


Explain why these circles should not be overlapping.

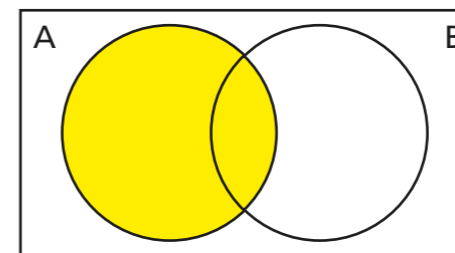
3 a) Match the Venn diagram to the correct statement.



A

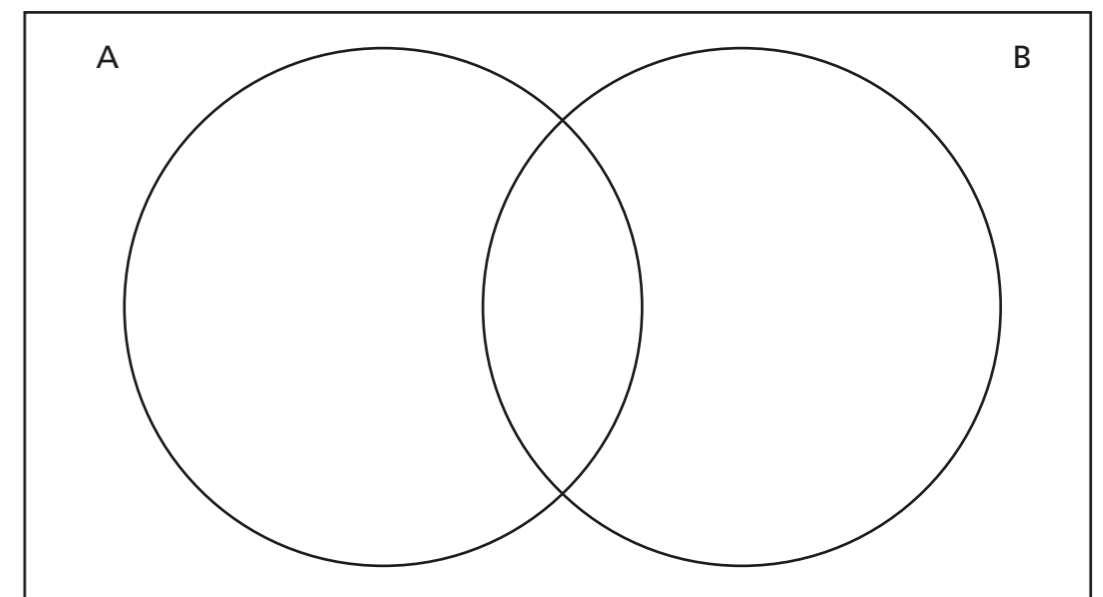


$A \cup B$

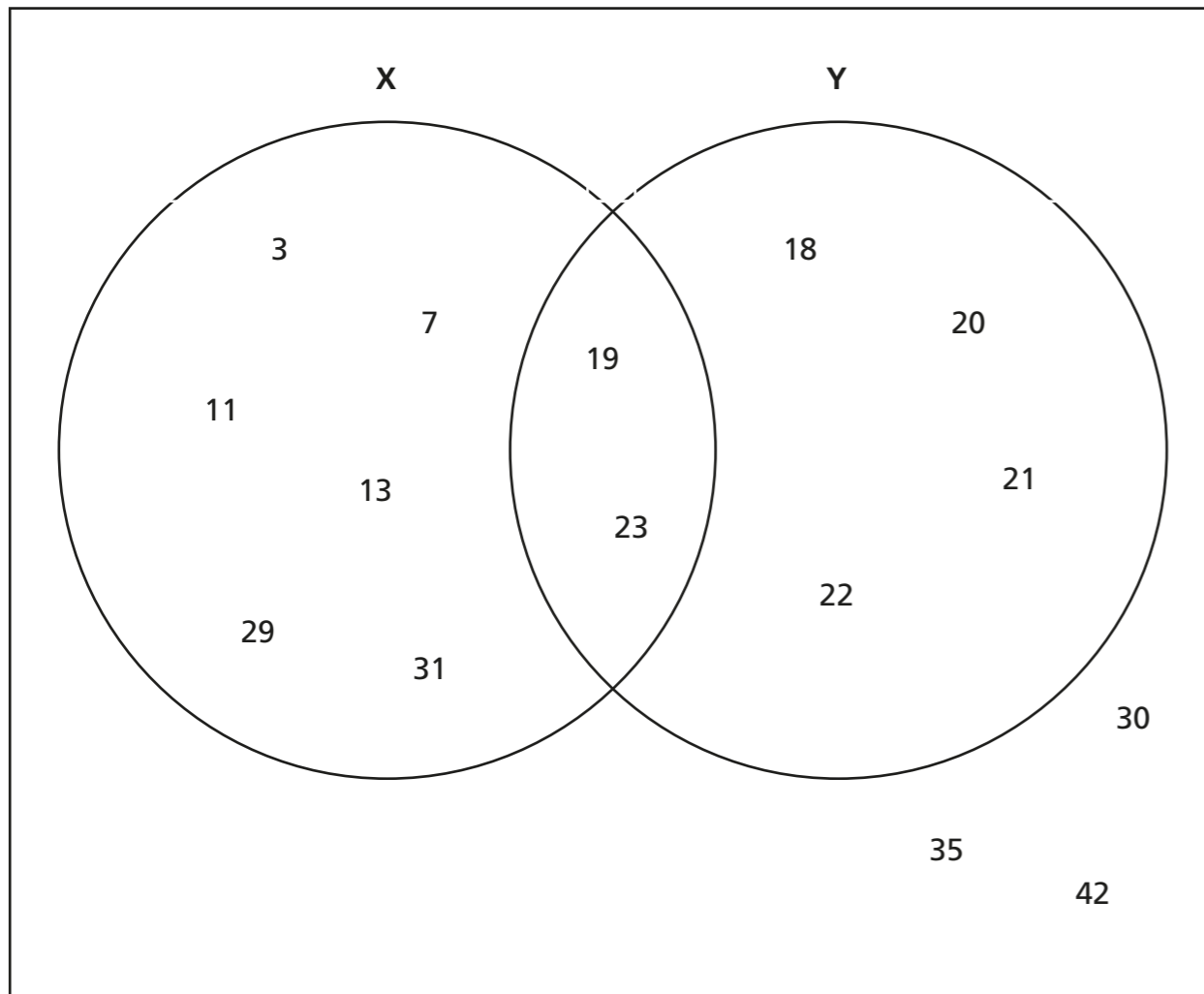


$A \cap B$

b) Shade the region described by B on the blank Venn diagram.



4 Here is a Venn diagram showing two sets: X and Y.



a) Complete the sets for:

X = _____

Y = _____

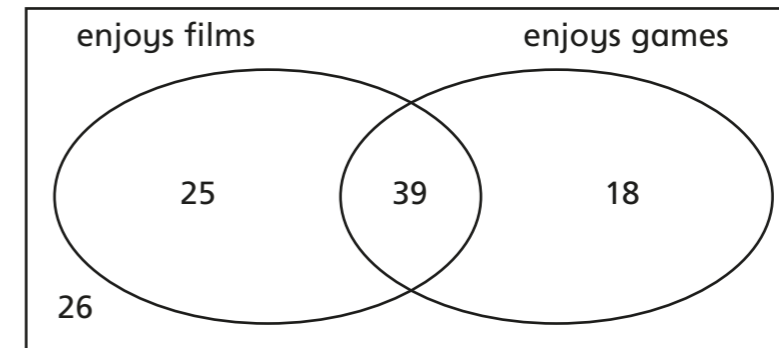
$X \cup Y =$ _____

$X \cap Y =$ _____

$X' =$ _____

b) Work with a partner to see if you can find another number that might go in Set X and Set Y.

5 The Venn diagram shows the number of students in a year group and whether they enjoy watching films and playing computer games.



A student is chosen at random.

Fill in the missing information.

a) $P(\text{enjoys films}) =$

b) $P(\text{does not enjoy games}) =$

c) $P(\text{enjoys games but not films}) =$

d) $P(\text{enjoys games and films}) =$

e) A member of the year group enjoys playing computer games. What is the probability that she does not enjoy films?

6 Use the information to complete a Venn diagram on paper.

28 students take only French and Spanish.

There are 71 Spanish students.

20 students only take German.

10 students study all three languages.

45 students study French, 2 of whom study only French.

46 students take exactly two languages.

Make up a question for a partner and swap questions.