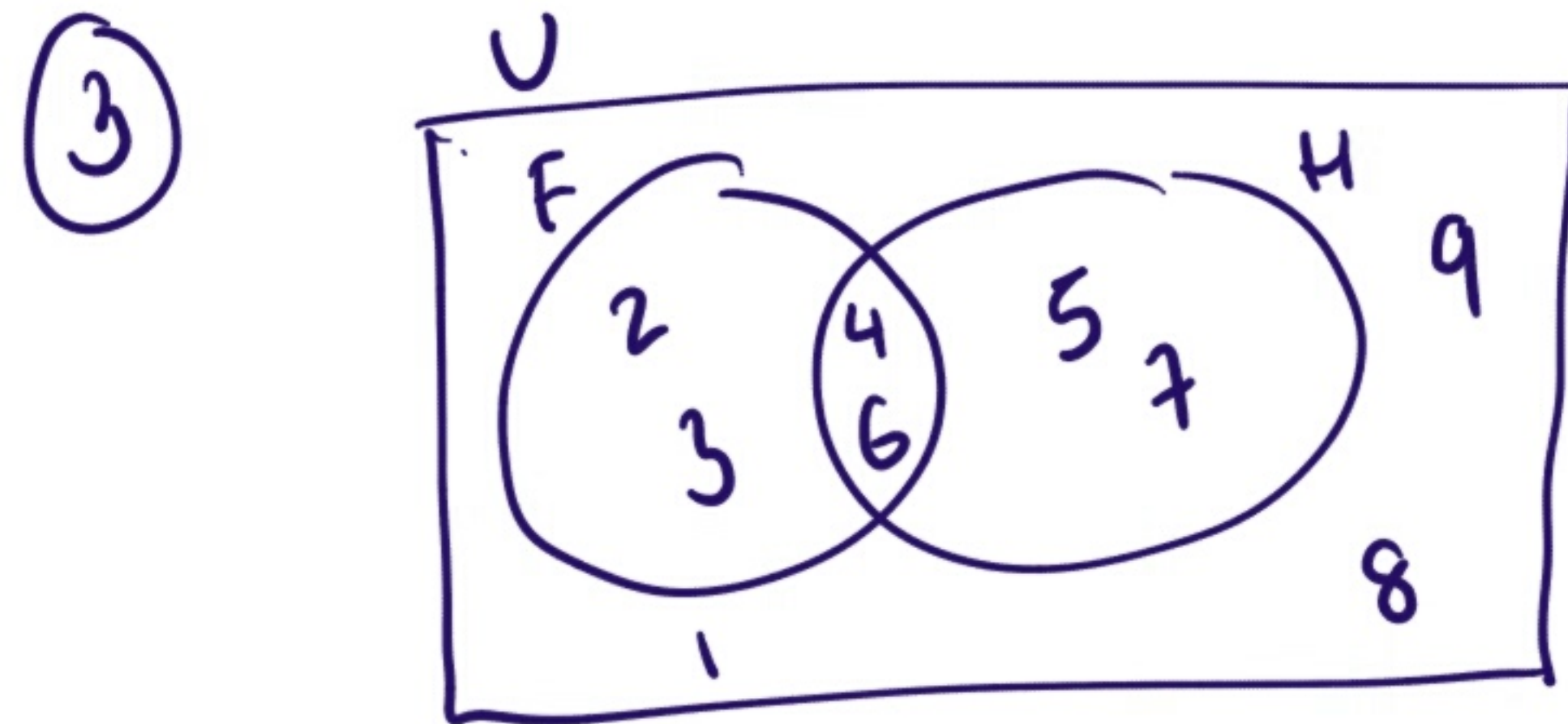


First year Sets Test Corrections

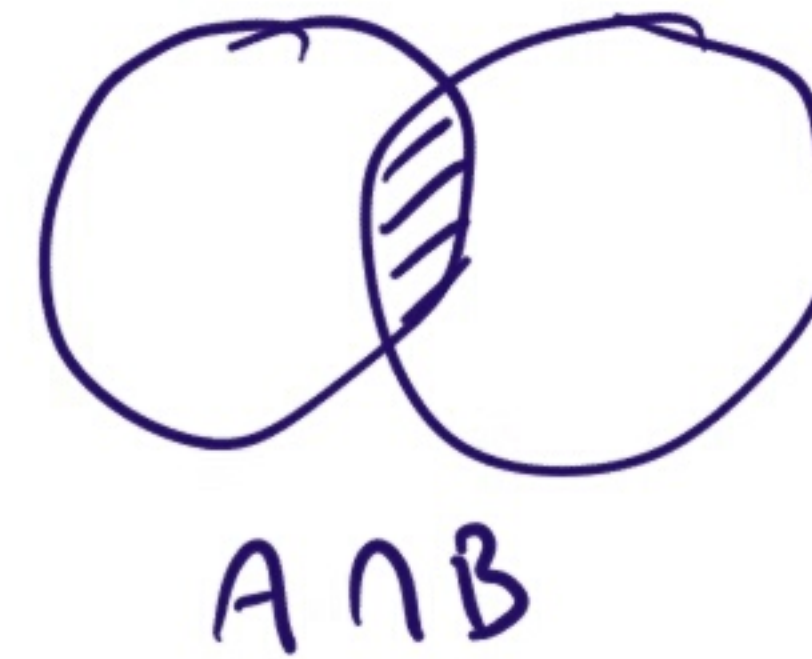
① $\{m, a, t, h, e, i, c, s\}$

② $c \notin X \quad c \in Y$

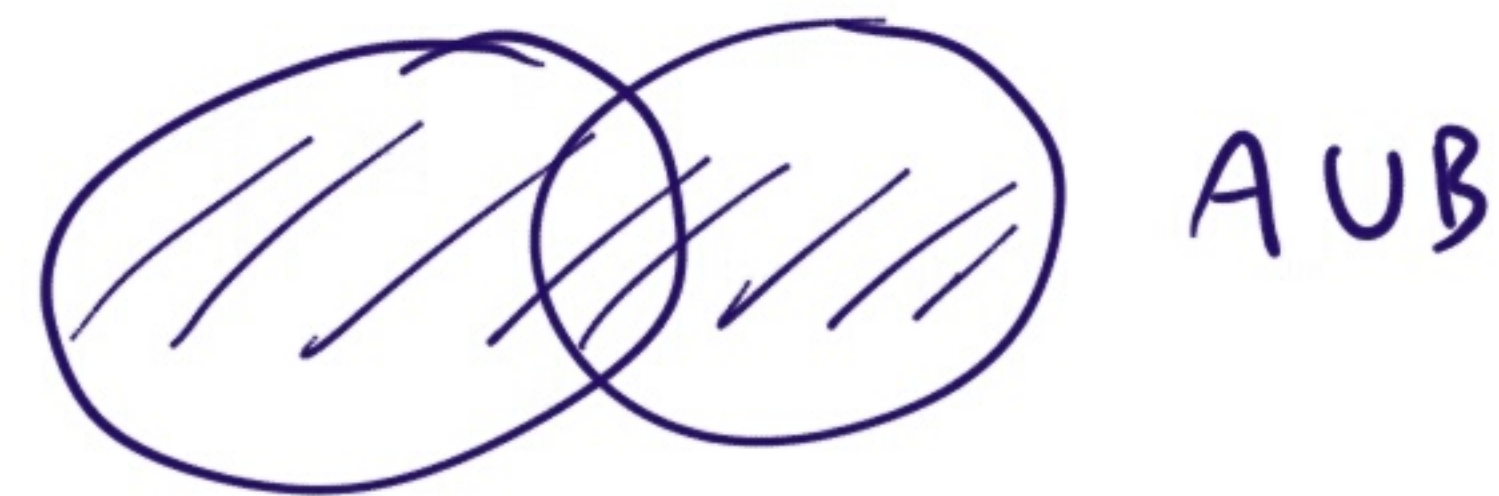


$\#(F \cap H) = 2$
 $F' = \{1, 5, 7, 8, 9\}$
 $(F \cup H)' = \{9, 1, 8\}$

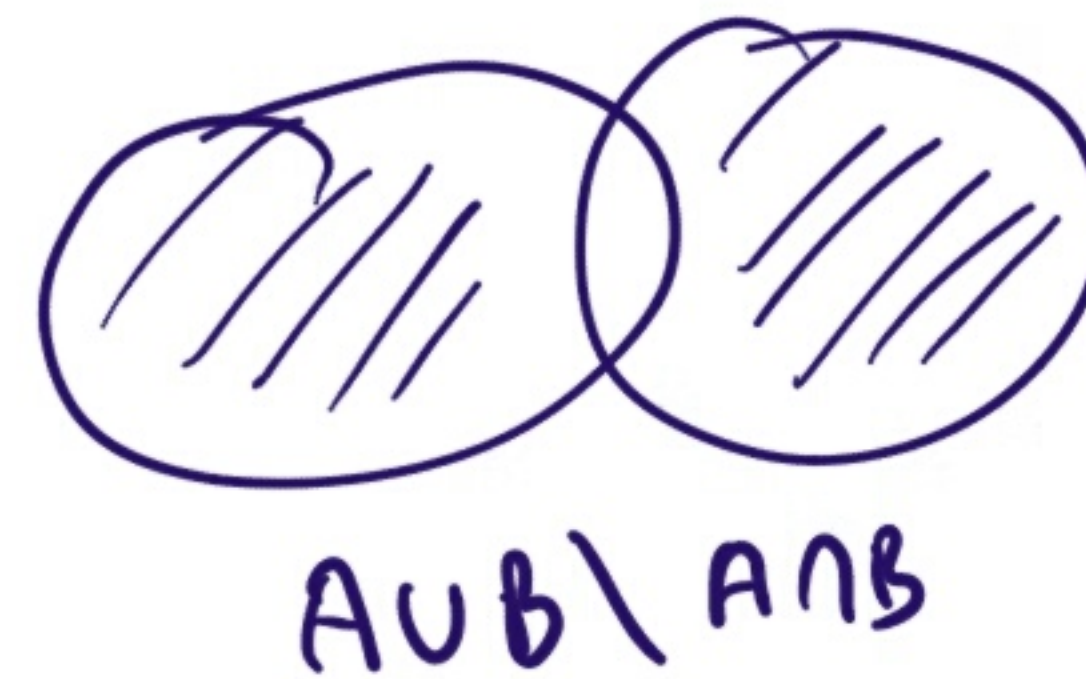
④ $\emptyset \quad \{\}$



$A \cap B$



$A \cup B$



$A \cup B \setminus A \cap B$

Factors and Primes

Factor - is a number that divides evenly into another number

1 is a factor of all numbers

Eg) The set of factors of 6
 $\{1, 2, 3, 6\}$ pairs of factors of 6
 $2 \times 3 = 6$
 $6 \times 1 = 6$

Factors \rightarrow Divisors

A number that has more than TWO factors - COMPOSITE NUMBER

HCF - Highest Common Factor
of two numbers is the highest number that divides evenly into both numbers.

Eg Find the HCF of 12 and 18

$$12 = 1, 2, 3, 4, \textcircled{6}, 12$$

$$18 = 1, 2, 3, \textcircled{6}, 9, 18$$

HCF of 12 and 18
is 6

HW pg 6

Q2 write out the pairs of factors

i) 18	ii) 30	iii) 36	iv) 40	
2x9	3x10	6x5	18x2	9x4
3x6	2x15	6x6	3x12	5x8
1x18	1x30	1x36		

Q8 Factors of 18 = 1, 2, 3, 6, 9, 18

Factors of 24 = 1, 2, 3, 4, 6, 8, 12, 24

The HCF of 18 and 24

$$\text{HCF} = 6$$

Prime Numbers and Prime Factors

A prime number is a positive whole number that has exactly TWO distinct factors, which are 1 and the number itself

HW → Research the real world use of prime numbers and prime factors

The list of the prime numbers less than 100

2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41,
43, 47, 53, 59, 61, 67, 71, 73, 79,
83, 89, 97

Pg 7 H/W

Q19) Write down the prime factors of each of these

① 12

② 30

③ 45

④ 84

⑤ 108