Form 1

Chapter 2: Factors and Multiples

TEACHER'S NAME:

NAME:

CLASS:

2.1 FACTORS, PRIME FACTORS AND HIGHEST COMMON FACTOR (HCF)

Notes: Factor in a whole number that can divide that number exactly

A Solve.

a) **3 is a factor of 15.** (Choose 1 answer)

TRUE FALSE

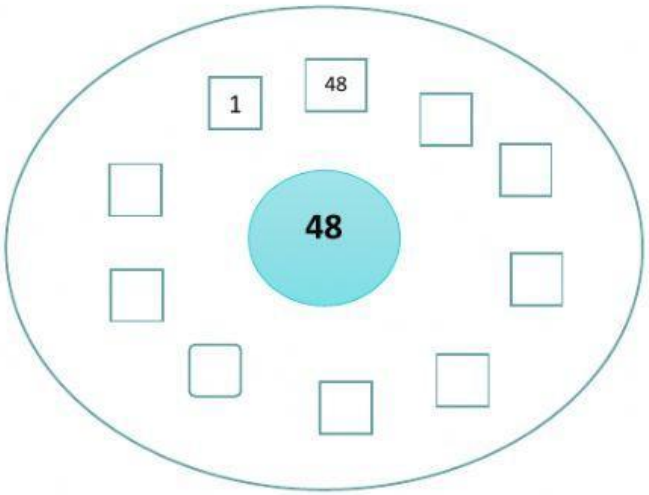
b) **9 is a factor of 120.** (Choose 1 answer)

TRUE FALSE

c)) (Choose the appropriate answer)

Number	Factor									
45	1	2	3	4	5	6	7	8	9	10
128	1	2	3	4	5	6	7	8	9	10

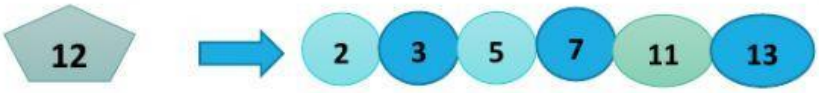
d **Complete the circle map below for the factor of 48.**
(Follow the sequence of numbers in a circle.)



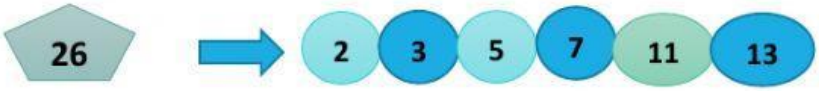
Notes: A prime factor is a factor that is also a prime number.

B Solve

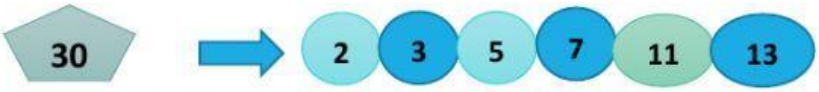
a Identify the prime factors



b Identify the prime factors



c Identify the prime factors



d Tick / on the correct statement and X for the incorrect statement.

	Number	Common factors	/ or X
i	12 and 20	1 , 2 , 4	
ii	6 , 24 and 30	1 , 2 , 3 , 6	
iii	12 , 18 and 32	1 , 2 , 3	

C Find the highest common factor (FSTB) for each of the following

b) 56 and 84

☐	56 , 84
☐	28 , 42
☐	14 , 21
	2 , 3

FSTB = ___ X ___ X ___

= _____

a) 12 and 30

2	12 , 30
3	☐ , ☐
	2 , 5

FSTB = _____ X _____

= _____

d) 30 , 90 and 315

☐	30 , 90 , 315
☐	6 , 18 , 63
	2 , 6 , 21

FSTB = ____ X ____

= _____

c) 30 , 90 and 315

2	36 , 84 , 132
2	☐ , 42 , 66
☐	9 , ☐ , 33
	3 , 7 , 11

FSTB = ___ X ___ X ___

= _____

D Solve. (Choose 1 answer)

a) The Mathematics Club in a school has a membership of 90 male students and 108 female students. During one training session, Ms. Wan wanted to divide all the team members into several equal groups according to their respective genders.

i) What is the maximum number of members that can be arranged for each group?

16 | 18 | 20 | 22

ii) State the number of groups that can be arranged.

6 | 8 | 10 | 12

b) Mansor wants to make some bags of snacks for her friends. He has 16 cans of drinks and 24 packs of crackers to be packed with the same number of cans of drinks and crackers in each bag.

State the number of Mansor's friends who will get one bag of snacks each.

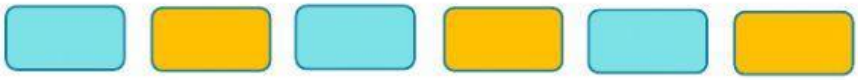
2 | 4 | 6 | 8

2.2 MULTIPLES, COMMON MULTIPLES AND LOWEST COMMON MULTIPLES

Notes:

- **The multiple of** a number is **the product** of the number multiplied by a number not 0

E Solve

a	**Write all multiples of 2 between 1 and 10.** 
b	**Write all multiples of 12 between 70 and 121.** 
c	**Write all multiples of 9 that are less than 50.** 
d	**Write all multiples of 8 between 50 and 100.** 

E Find the smallest common multiple (GSTK) by listing the common multiples of the numbers below..

. **(Write answers using commas and without spaces up to the first number of GSTK only)**

Examples: 1,2,3

a	**3 , 4 and 8.** **Multiples of 3** → _____ **Multiples of 4** → _____ **Multiples of 8** → _____ **GSTK for numbers 3, 4 and 8 is = _____**

b	5 , 10 and 15 Multiples of 5 → _____ Multiples of → _____ Multiples of → _____ GSTK for numbers 5, 10 and 15 is = _____
c	5 , 8 and 10. Multiples of 5 → _____ Multiples of 8 → _____ Multiples of → _____ GSTK for numbers 5, 8 and 10 is = _____

F Find the least common multiple (GSTK) by the repeated division method.

a) 56 and 84

○	56 , 84
○	14 , 21
○	2 , 3
○	1 , 3
	1 , 1

GSTK is _____

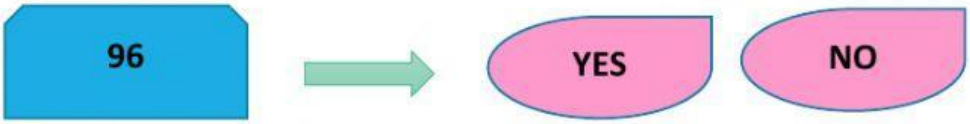
b) 15, 30 and 34

○	15 , 30 , 34
○	5 , 10 , 34
○	1 , 2 , 34
○	1 , 1 , 17
	1 , 1 , 1

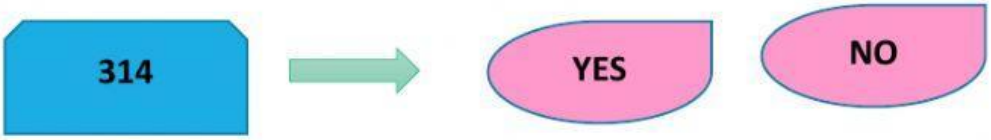
GSTK is _____

G Determine whether 4 is a factor of the following number. Choose the correct answer.

a) i)

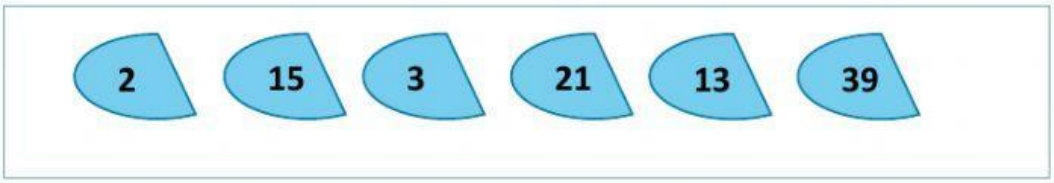


ii)

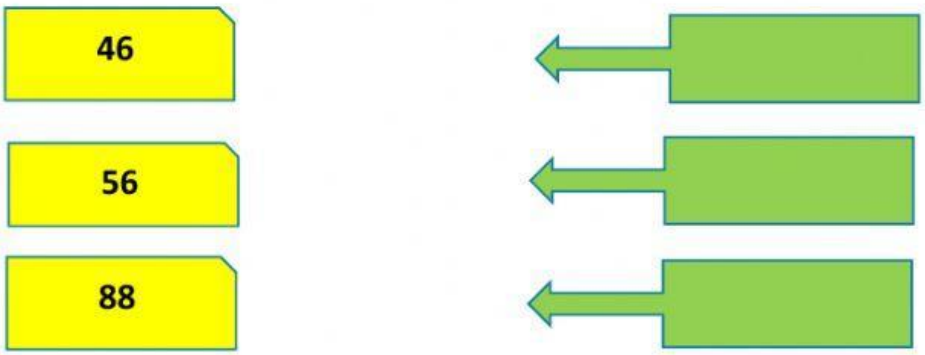


b) Match the following pair of numbers with the correct highest common factor.

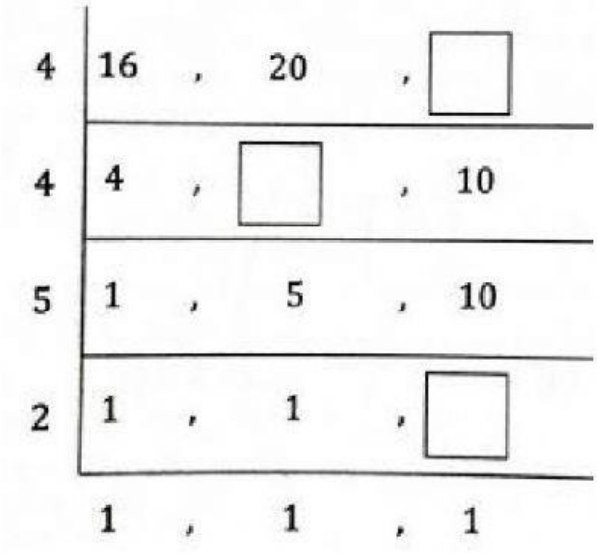
c) Choose a factor of 39.



d) Mark / on the number which is a multiple of 4 and X if not.



e) **Fill in the blanks with the correct answer.**



GSTK = 4 X 4 X 5 X 2 =