



Name: _____ **Date:** _____ **Score:** _____ / 38

- 1** a. Write down all the factors of 36.
b. Write down the first five multiples of 7.
c. Here is a list of numbers.
15 23 27 31 39 49
Write down the prime numbers in the list.

(3 marks)

Answer _____

- 2** Meera says
"Every multiple of 5 ends in the digit 5."
Give an example to show that Meera is wrong.

(2 marks)

Answer _____

- 3** a. Write down all the common factors of 24 and 40.
b. Write down the first three common multiples of 6 and 8.

(3 marks)

Answer _____

- 4** a. By listing factors, find the highest common factor (HCF) of 18 and 30.
b. By listing multiples, find the lowest common multiple (LCM) of 18 and 30.

(3 marks)

Answer _____

- 5 Work out how many positive whole numbers less than 100 are multiples of both 4 and 6. (3 marks)

Answer _____

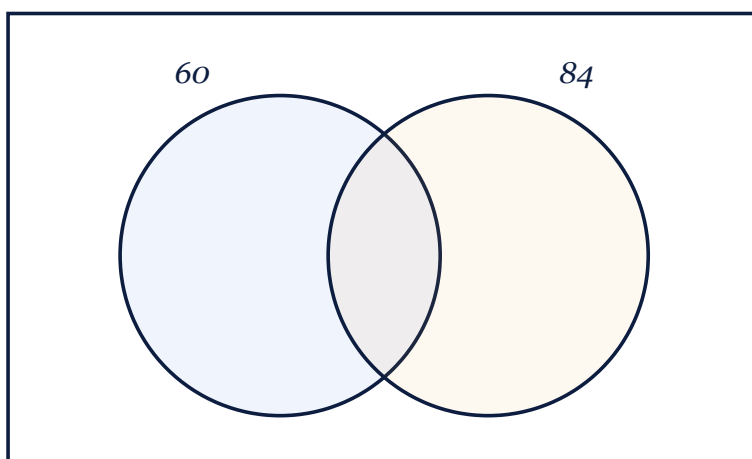
- 6 a. Write 180 as a product of its prime factors. Give your answer in index form.
b. Write 350 as a product of its prime factors. Give your answer in index form. (3 marks)

Answer _____

- 7 Write down two numbers, both greater than 20, whose highest common factor (HCF) is 7 (2 marks)

Answer _____

- 8 $60 = 2 \times 2 \times 3 \times 5$
 $84 = 2 \times 2 \times 3 \times 7$
a. Complete the Venn diagram to show the prime factors of 60 and 84.
b. Use your Venn diagram to find the highest common factor (HCF) of 60 and 84.
c. Use your Venn diagram to find the lowest common multiple (LCM) of 60 and 84.



(4 marks)

Answer _____

9 $A = 2^3 \times 3 \times 5^2$

$B = 2^2 \times 3^2 \times 5$

- Find the highest common factor (HCF) of A and B .
- Find the lowest common multiple (LCM) of A and B .
Give your answers as products of powers of primes.

(3 marks)

Answer _____

- 10 a. Write 126 as a product of its prime factors.

- b. Find the lowest common multiple (LCM) of 126 and 60

(4 marks)

Answer _____

- 11 a. Write 448 as a product of powers of its prime factors.

- b. Find the highest common factor (HCF) of 448 and 168

(4 marks)

Answer _____

12

- a. Miss Khan has 48 pencils and 72 rulers. She puts all of them into packs so that every pack is the same. She makes as many packs as possible. How many packs does she make, and what is in each pack?
- b. A number 12 bus leaves the school every 12 minutes. A number 20 bus leaves the school every 20 minutes. Both buses leave the school at 08:00. When is the next time they both leave the school together?

(4 marks)

Answer

End of questions | Total 38 marks