



- 1 Write down the multiple of 4 that is between 25 and 31.

(1 mark)

Multiples of 4: 4, 8, 12, 16, 20, 24, 28, 32, ..

The only one between 25 and 31 is 28

28

- 2 Write down a multiple of 7 that is between 30 and 40.

(1 mark)

7, 14, 21, 28, 35, 42

35

- 3 Write down the first five multiples of 6.

(2 marks)

6, 12, 18, 24, 30

6, 12, 18, 24, 30

- 4 Here is a list of numbers.

12 15 21 26 33

Write down the number from the list that is a multiple of 13.

(1 mark)

Multiples of 13: 13, 26, 39, ..

26 = 2×13 , so 26 is the multiple of 13

26

- 5 Write down all the factor pairs of 18.

(2 marks)

$$1 \times 18 = 18$$

$$2 \times 9 = 18$$

$$3 \times 6 = 18$$

1 and 18, 2 and 9, 3 and 6

6 Jake says, "All multiples of 3 are odd numbers."

Give an example to show that Jake is wrong.

(2 marks)

3, 6, 9, 12 ...

6 is a multiple of 3

6 is even

6

7 Find the lowest common multiple (LCM) of 4 and 6.

(2 marks)

4, 8, 12, 16, 20

6, 12, 18, 24

12

8 Write down all the factors of 15.

(1 mark)

Work in factor pairs: 1×15 and 3×5

The factors of 15 are 1, 3, 5 and 15

1, 3, 5, 15

9 I am thinking of a number.

- It is a multiple of 5.
- It is a factor of 60.
- It is between 20 and 40.

What is my number?

(3 marks)

Multiples of 5: 25, 30, 35

$60 \div 25 = 2.4$ no

$60 \div 30 = 2$ yes

$60 \div 35 = 1.7...$ no

30

10 Write down the factor of 42 that is between 10 and 20.

(1 mark)

The factors of 42 are 1, 2, 3, 6, 7, 14, 21 and 42

The only factor between 10 and 20 is 14

14

11 Write down the smallest positive even multiple of 9.

(1 mark)

Multiples of 9: 9, 18, 27, 36, ..

9 is odd, so the smallest positive even multiple is 18

18

12 Here is a list of numbers.

5 7 9 13 24

Write down the number from the list that is a factor of 36.

(1 mark)

$36 \div 9 = 4$ exactly, so 9 is a factor of 36

36 is not divisible by 5, 7, 13 or 24

9

13 List all the factors of 28.

(2 marks)

Work in factor pairs: 1×28 , 2×14 , 4×7

The factors of 28 are 1, 2, 4, 7, 14 and 28

1, 2, 4, 7, 14, 28

14 Here is a list of numbers.

6 18 25 32 39

a. Write down the number from the list that is a square number.

b. Write down the number from the list that is a multiple of 9.

(2 marks)

(a) $25 = 5 \times 5$, so 25 is a square number

(b) $18 = 2 \times 9$, so 18 is a multiple of 9

15 Meera says

"Every multiple of 5 ends in the digit 5."

Give an example to show that Meera is wrong.

(2 marks)

Multiples of 5 end in 5 or 0

Any multiple of 5 that ends in 0, such as 10, 20 or 30, shows

Meera is wrong

Any multiple of 5 ending in 0, e.g. 10

16

Work out how many positive whole numbers less than 100 are multiples of both 4 and 6.

(3 marks)

We count positive whole numbers only, excluding zero and negative multiples. The least common multiple of 4 and 6 is 12 because it is the first number in both positive multiplication lists

A number that is a multiple of both 4 and 6 must be a multiple of 12

Multiples of 12 less than 100: 12, 24, 36, 48, 60, 72, 84, 96

There are 8 such numbers

8
