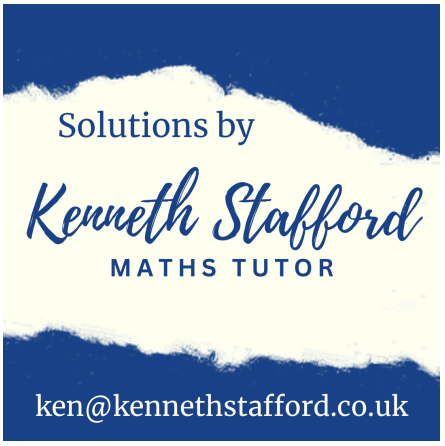
Name: SOLUTIONS

GCSE (1 - 9)

Factors, Multiples and Primes

Buy me a coffee



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They contain exam questions from up until the ***Summer 2023*** exam series
More recent exam papers do exist but are withheld for mock exams
As new exam papers are released these worksheets will gradually be updated
The ***most current*** version of these worksheets will always be available at: kennethstafford.co.uk

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1

Here is a list of numbers.

21 22 23 24 25 26 27 28 29

(a) From the numbers in the list, write down a square number.

25

(1)

(b) From the numbers in the list, write down a number that is a multiple of **both** 4 and 6

24

(1)

(c) Write down all the prime numbers in the list.

23 and 29

(1)

(Total for Question 8 is 3 marks)

[Edexcel, GCSE, Summer 2017, Paper 2F, Q8]

2

Write down a multiple of 6 that is between 40 and 50

42 or 48

(Total for Question 2 is 1 mark)

[Edexcel, GCSE, Autumn 2017, Paper 2F, Q2]

3

Steve says,

"There are more prime numbers between 20 and 30 than there are between 10 and 20"

Is Steve right?
You must show how you get your answer.

23 29

11 13 17 19

No. There are more between 10 and 20

(Total for Question 7 is 2 marks)

[Edexcel, GCSE, Autumn 2017, Paper 2F, Q7]

4

Write down all the factors of 18

1 18
2 9
3 6

1, 18, 2, 9, 3, 6

(Total for Question 3 is 2 marks)

[Edexcel, GCSE, Autumn 2017, Paper 3F, Q3]

5

Nidah writes down two different prime numbers.

She adds together her two numbers.
Her answer is a square number less than 30

Find two prime numbers that Nidah could have written down.

2, 3, 5, 7, 11, 13, 17, 19

1, 4, 9, 16, 25

2 + 7 = 9

5 + 11 = 16

2 , 7

or

5 , 11

(Total for Question 9 is 2 marks)

[Edexcel, GCSE, Autumn 2017, Paper 3F, Q9]

6

Write down the first even multiple of 7

7 14 21 28

14

(Total for Question 5 is 1 mark)

[Edexcel, GCSE, Summer 2018, Paper 1F, Q5]

7

Write down an example to show that each of the following two statements is **not** correct.

(a) The factors of an even number are always even.

Factors of 4 : 1, 2, 4

4 is even but has an odd number of factors

(1)

(b) All the digits in odd numbers are odd.

Only the last number needs to be odd.

e.g. 21

(1)

(Total for Question 11 is 2 marks)

[Edexcel, GCSE, Summer 2018, Paper 1F, Q11]

8

Margaret is thinking of a number.
She says,

"My number is odd. It is a factor of 36 and a multiple of 3"

There are two possible numbers Margaret can be thinking of.

Write down these two numbers.

Factors of 36

1 36
2 18
3 12
4 9
6

Multiples of 3

3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36

3 9

(Total for Question 6 is 3 marks)

[Edexcel, GCSE, Summer 2018, Paper 2F, Q6]

9

(a) Write down all the prime numbers between 20 and 30

23, 29

(2)

Catherine says,

"2 is the only even prime number."

(b) Is Catherine right?
You must give a reason for your answer.

Yes. Every other even number has more than 2 factors.

(1)

(Total for Question 10 is 3 marks)

[Edexcel, GCSE, Summer 2018, Paper 2F, Q10]

10

Write down all the factors of 30

30	
1	30
2	15
3	10
5	6

1, 30, 2, 15, 3, 10, 5, 6

(Total for Question 6 is 2 marks)

[Edexcel, GCSE, Summer 2018, Paper 3F, Q6]

11

Here is a list of numbers.

3 5 7 12 15 18 20

From the list, write down a factor of 10

Factors of 10	
1	10
2	5

5

(Total for Question 3 is 1 mark)

[Edexcel, GCSE, Autumn 2018, Paper 1F, Q3]

12

Write down two prime numbers that have a sum of 32

Prime Numbers: 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37

3 and 29

13 and 19

(Total for Question 10 is 2 marks)

[Edexcel, GCSE, Autumn 2018, Paper 1F, Q10]

13

Write down a prime number that is between 20 and 30

23 or 29

(Total for Question 4 is 1 mark)

[Edexcel, GCSE, Summer 2019, Paper 1F, Q4]

14

Write down two factors of 15

Any two from:

1, 15, 3 and 5

(Total for Question 3 is 1 mark)

[Edexcel, GCSE, Summer 2019, Paper 2F, Q3]

15

Write down a multiple of 8 that is between 41 and 60

Multiples of 8: 40, 48, 56, 64

48 or 56

(Total for Question 2 is 1 mark)

[Edexcel, GCSE, Summer 2019, Paper 3F, Q2]

19

Write down **three** different factors of 20

20

1 20
2 10
4 5

← any 3 from here.

..... , ... , ...

(Total for Question 7 is 2 marks)

[Edexcel, GCSE, Summer 2023, Paper 1F, Q7]

20

Here is a list of numbers.

20 40 60 80 100

One of these numbers is a multiple of 25

Which number?

25, 50, 75, 100

100

(Total for Question 5 is 1 mark)

[Edexcel, GCSE, Summer 2023, Paper 2F, Q5]

21

Write down a factor of 60 that is between 8 and 14

60

1 60
2 30
3 20
4 15
5 12
6 10

10 or 12

(Total for Question 4 is 1 mark)

[Edexcel, GCSE, November 2022, Paper 1F, Q4]

22

Here is a list of numbers.

5 11 18 22 29

From the list, write down a multiple of 3

3, 6, 9, 12, 15, 18, 21, 24, 27, 30

18

(Total for Question 5 is 1 mark)

[Edexcel, GCSE, November 2022, Paper 2F, Q5]

23

Write down a 3 digit number that is a multiple of 5

any 3 digit number ending in '5' or '0'

eg. 230 or 365

(Total for Question 4 is 1 mark)

[Edexcel, GCSE, Summer 2022, Paper 2F, Q4]

24

Write down two factors of 12

12

1 12
2 6
3 4

any 2 from here.

(Total for Question 3 is 1 mark)

[Edexcel, GCSE, Summer 2022, Paper 3F, Q3]