FACTORS, MULTIPLES AND PRIMES

GRADE 2

AtoZrevision

Examination practice questions

You should have:

A ruler, protractor, compasses, a pen, pencil, eraser, calculator.
For some questions, you may need tracing paper.

Instructions

- Use **black** ink or ball-point pen.
- Answer the questions in the spaces provided – *there may be more space than you need.*
- **Calculators may be used.**

Information

- The marks for each question are shown in brackets.
- If the number of marks for two similar questions isn't the same, this is likely due to them being modelled on different specifications. In this case, it is worth considering both mark schemes.
- Use the number of marks for each question as a guide as to how much time to spend on each question. As a rough guide, you can multiply the number of marks by 1.2 to see how many minutes you should spend on a question.
- Questions will generally get more challenging as the document progresses. Some of the latter questions will go beyond the core grade level for this topic.

Advice

- Read each question carefully before you start to answer it.
- Don't forget to have fun.
- Check your answers at the end.

Q1. AtoZrevision.com

Here is a list of numbers.

3	5	7	8	9	10	12

From the list of numbers, write down a multiple of 6.

A1 12 .....

(1 mark)

Q2. AtoZrevision.com

Write down a factor of 18.

1, 2, 3, 6, 9, 18

A1 9 .....

(1 mark)

Q3. AtoZrevision.com

Circle two factors of 12 from the list below:

1 3 5 8 24 100

A1

(1 mark)

Q4. AtoZrevision.com

Write down two factors of 30 that are prime numbers.

1, 2, 3, 5, 10, 15, 20

..... 2 ..... and ..... 5 .....

A1

(1 mark)

Q5. AtoZrevision.com

Write down a factor of 44 that is a prime number.

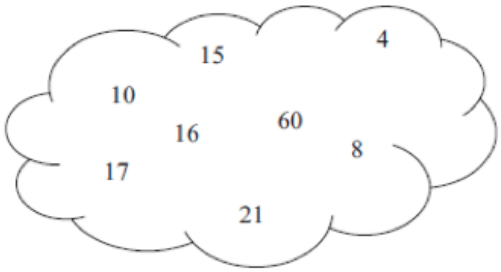
e.g. 2 .....

(1 mark)

A1

Q6. AtoZrevision.com

From the numbers in the cloud,



a) Write down a multiple of 7.

A1 21 .....

b) Write down a prime number.

A1 17 .....

(2 marks)

Q7. AtoZrevision.com

Circle the factor of 16 that is a prime number:

1 2 4 8 16

A1

(1 mark)

Q8. AtoZrevision.com

Here is a list of numbers:

6 8 17 36 44 76 91

From the numbers in the list, write down a factor of 30.

A1 6 .....

(1 mark)

Q9. AtoZrevision.com

Write down two factors of 35.

1, 5, 7, 35 Any two of: 5, 7 .....

A1

(1 mark)

Q10. AtoZrevision.com

Here is a list of eight numbers.

10 23 27 30 42 52 74 81

From the list, write down,

(i) a square number

A1 81

(ii) a factor of 50

A1 10

(iii) a prime number

A1 23

(3 marks)

Q11. AtoZrevision.com

John says,

'Every multiple of 5 ends in 5'

Is he correct?

5 5 10 !

A1 No

(1 mark)

Q12. AtoZrevision.com

Write down the number between 50 and 60 that is a multiple of 11.

A1 55

(1 mark)

Q13. AtoZrevision.com

Which of these numbers is divisible by 3?

7 10 25 42 13

A1 42

(1 mark)

Q14. AtoZrevision.com

Write down all the factors of 44 that are prime numbers.

1, 2, 4, 11, 22, 44 2, 11

M1 A1

(2 marks)

Q15. AtoZrevision.com

I am thinking of a number.

My number is a **multiple of 4.**

Tick the true statement below.

A1 ✓ My number must be even

My number must be odd

My number could be odd or even

(1 mark)

Q16. AtoZrevision.com

I am thinking of a number that is **greater than 3**
My number is a **factor of 30**

What could my number be?

List all possible answers.

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

A1

M1

(2 marks)

Q17. AtoZrevision.com

Henry thinks of a number between 1 and 20

He thinks of the number 12

Is it a **multiple of 3**?

Yes!

A1

(1 mark)

Q18. AtoZrevision.com

Here is a list of numbers.

2 3 4 12 13 14 15 22 24

From this list, write down a multiple of 6.

12 or 24

A1 12

(1 mark)

Q19. AtoZrevision.com

Here is a list of numbers.

From this list, circle a number which is a prime number **and** is a factor of 42.

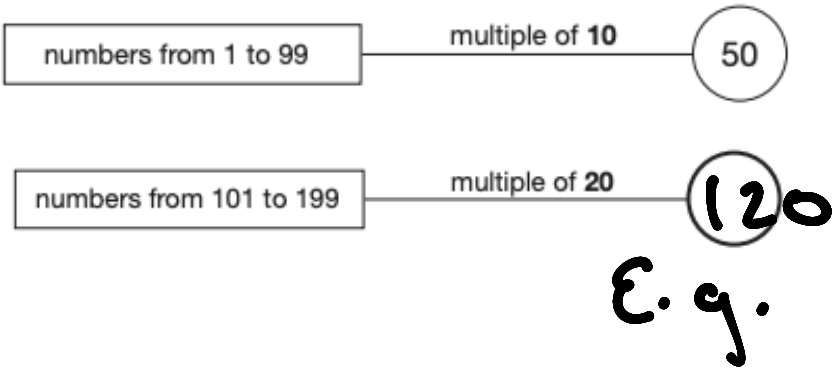
7 13 16 21 27 36 45 65

A1

(1 mark)

Q20. AtoZrevision.com

In the circle, write a multiple that belongs to each set.
One has been done for you.



E.g.

A1

(1 mark)

Q21. AtoZrevision.com

Here is a list of numbers.

12 14 15 16 18 20 22 24

Two numbers in the list are factors of 90

Which two numbers?

15 and 18

A1

(1 mark)

Q22. AtoZrevision.com

Write down a two digit multiple of 20.

20, 40, 60, 80....

40 .....

A1

(1 mark)

Q23. AtoZrevision.com

Write down a multiple of 13 that is less than 40.

Answer: 13, 26, 39

26 .....

A1

(1 mark)

Q24. AtoZrevision.com

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.

1, 2, 3, 6, 9, 4, 12, 18, 36

3 ..... and 9 .....

A1 A1

(2 marks)

Q25. AtoZrevision.com

How many multiples of 5 are less than 44?

5, 10, 15, 20, 25, 30, 35, 40

8 .....

A1

(1 mark)

Q26. AtoZrevision.com

Find the multiple of 45 that is closest to 8000.

45 x 177 = 7965

45 x 178 = 8010

8010

A1

(1 mark)

Q27. AtoZrevision.com

Chen uses these digit cards.

5	6	9

She makes a 2-digit number and a 1-digit number.

She multiplies them together.
Her answer is a multiple of 10

96 x 5

What could Chen's multiplication be?

A1 96x5

(1 mark)

Q28. AtoZrevision.com

An odd two digit number is a multiple of 9. When its digits are multiplied the result is also a multiple of 9.
Which of these numbers could it be ?

x digits

A1

CDO

27 36 45 63 81

14 20 18

9, 18, 27, 36, 45, 54, 63, 72

81

8 81, 90, 99 81

(1 mark)

Q29. AtoZrevision.com

Think of a number, double it, then add 3. Multiply your answer by 4 and from this subtract 5. Now also subtract the number you first thought of.

No matter what your first number was, your answer will be a multiple of?

A1

e.g. 5 → 10 → 13 → 52 → 47 3

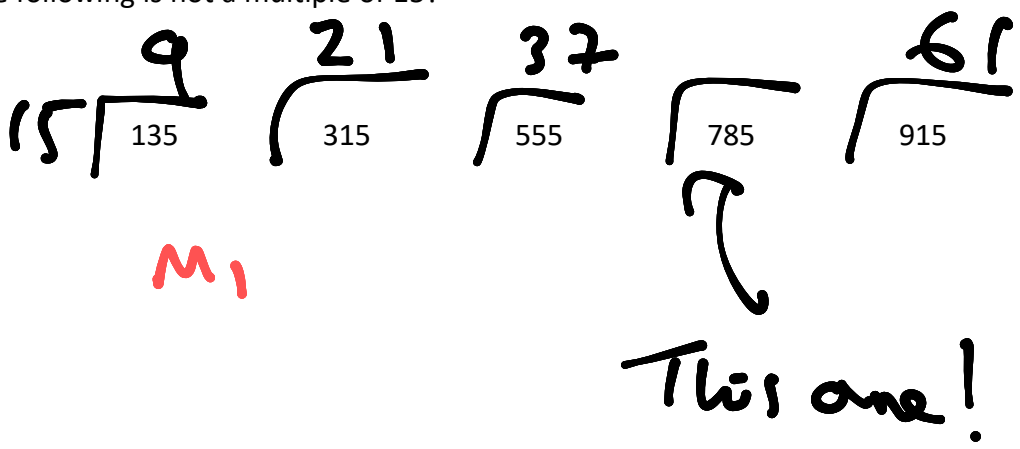
47-5 = 42. M1

2 → 4 → 7 → 28 → 23 → 21

(2 marks)

Q30. AtoZrevision.com

Which of the following is not a multiple of 15?



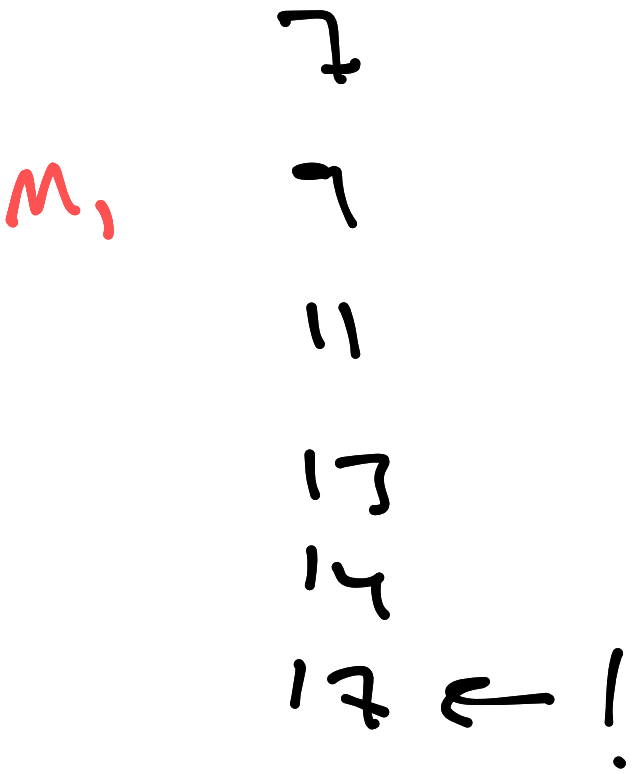
A1 785

(2 marks)

Q31. AtoZrevision.com

Kai has begun to list, in ascending order, the positive integers which are not factors of 240.

What is the sixth number on Kai's list?



A1 17

(2 marks)

Q32. AtoZrevision.com

Sam starts to list, in ascending order, every positive integer which is *not* a factor of 720. What is the tenth number on her list?

7, 11, 13, 17, 19, 23, 26

29, 31, 37

M1

Try listing the factors of 720.

The missing numbers in your list will be the non-factors

A1 37

(2 marks)

Q33. AtoZrevision.com

For which of the following numbers is the sum of all its factors *not* equal to a square number?

3 22 40 66 70

1 + 3

1, 2,

M1 4

11, 22

36

40 : 1, 2, 4, 5, 8, 10, 20, 40 → 90

M1

66 : 1, 2, 3, 6, 11, 22, 33, 66 → 144

70 : It's got to be this one!

A1 70

(3 marks)