

Factors, Multiples and Primes Exam Practice



Factors of Numbers

Q1. Write down all the factors of 36 (1 mark)

Q2. Which of these is *not* a factor of 60?

2, 3, 5, 8, 10, 12, 20, 30

(1 mark)

Q3. List all the factors of 11 (1 mark)

Q4. Identify all the numbers in the list below which are a factor of 140

1, 2, 3, 5, 7, 12, 15, 20, 30, 35, 45, 70

(2 marks)

Q5. Write down all the factors of 85 (1 mark)

Q6. Joy is thinking of a number. Given that 8 is a factor of this number, use this information to write down 3 more factors of the number she is thinking of.

(3 marks)

Multiples of Numbers

Q7. Write down a multiple of 6 that is bigger than 30 but lower than 40.

(1 mark)

Q8. List all the multiples of 15 under 70 (2 marks)

Q9. Which of these numbers is *not* a multiple of 12:

12, 48, 84, 112, 132, 1200

(1 mark)

Q10. Write down the next multiple of 14 after 182. (1 mark)



Q11. List the first five multiples of 7. (2 marks)

Q12. Write down the first number larger than 444 which is not a multiple of 4. (1 mark)

Prime Numbers

Q13. Write down all the prime numbers between 30 and 40 (2 marks)

Q14. List two prime numbers whose sum is 20 (1 mark)

Q15. Identify all the numbers in the list below which are *not* prime numbers:

1, 3, 9, 13, 17, 49, 53, 91, 208 (1 mark)

Q16. List two prime numbers whose sum is a square number (1 mark)

Q17. You are given that 1151 is prime.
List all the factors of this number. (2 marks)

Q18. List all the prime numbers which are smaller than 20 (2 marks)

Mixed Problems

Q19. Here is a list of numbers

3, 4, 5, 10, 22, 28, 48, 47, 51

From the numbers on the list:

- (i) write down a factor of 16 (1 mark)
- (ii) write down a multiple of 7 (1 mark)
- (iii) write down all of the prime numbers on the list (2 marks)

Q20. Find a number which is a multiple of 8 and 7 (1 mark)



- Q21. Peter is thinking of a number.
It is a multiple of 20 and also a square number.
Write down two of the possible numbers which Peter could be thinking of. (2 marks)
- Q22. Mike says, “all prime numbers are odd”. Do you agree?
You must explain your answer. (1 mark)
- Q23. Here is a list of numbers
2, 4, 5, 10, 12, 27, 36, 43, 47, 57
From the numbers on the list:
- (i) write down the cube number (1 mark)
 - (ii) write down all the multiples of 12 (1 mark)
 - (iii) write down all of the prime numbers on the list (1 mark)
- Q24. Ray says, “45 is a prime number”. Do you agree?
You must explain your answer. (1 mark)
- Q25. Sarah says, “the sum of any two prime numbers is even”.
Do you agree? You must explain your answer. (1 mark)
- Q26. John is thinking of an odd number.
It is a factor of 63 and it is a multiple of 7.
Write down one of the possible numbers he is thinking of. (1 mark)
- Q27. Matt is thinking of a pair of prime numbers.
The difference between them is a factor of 10.
List all the possible pairs. (2 marks)
- Q28. A number is a multiple of 8, and has 25 as one of its factors.
Find the smallest such number. (1 mark)