Year 6 Factors and Multiples

Q1. Write the missing numbers.

Factors of 20 = {1, _____ , _____ , _____ , _____ , 20}

1 mark

Q2. The factor pairs of 8 are

| 1 | and | 8 |

| 2 | and | 4 |

Write all the factor pairs of 42

| 1 | and | 42 |

| 2 | and | |

| | and | |

| 6 | and | |

2 marks

Q3. 1 and 48 is factor pair of 48. Find three other factor pairs of 48

| | and | |

| | and | |

| | and | |

2 marks

Q4. 1 and 35 is a factor pair of 35. What is the other factor pair of 35?

| | and | |

1 mark

Q5. Here are five numbers.

~~2~~   3   4   5   6

Write each number on the correct cards.

The number 2 has been written on the correct cards for you.
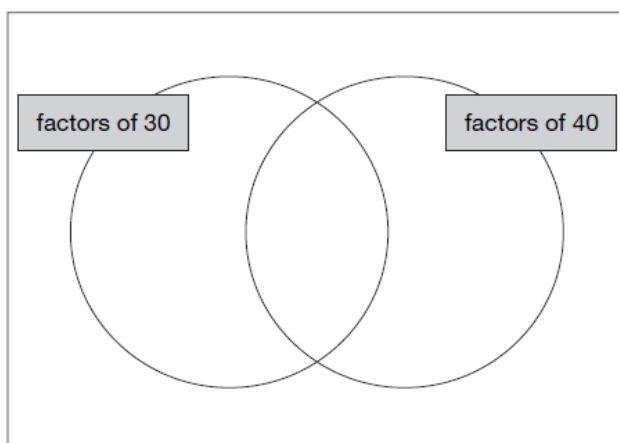
Prime numbers	Factors of 12	Factors of 15
2	2	

2 marks

Q6. Tick the numbers that are common factors of both **12 and 18**

2 ☐

3 ☐

6 ☐

9 ☐

12 ☐

2 marks

Q7. Write these numbers in the correct places on the diagram.

5   **6**   **7**   **8**

factors of 30   factors of 40

2 marks

Q8. Write in the **two** missing digits.

| | 0 | × | | 0 | = | 3 | 0 | 0 | 0 |

Q9. Here are four digit cards.

| 7 | | 5 | | 2 | | 1 |

Choose two cards each time to make the following two-digit numbers.
The first one is done for you.

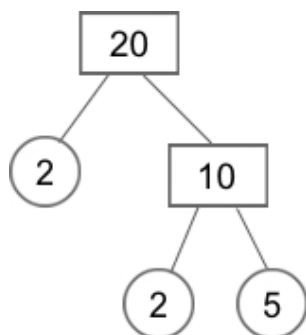an even number | 5 | 2 |
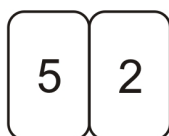
a multiple of 9 | | |

a square number | | |

a factor of 96 | | |

Q10. Any number can be written as a product of its prime factors, for example:

$$20 = 2 × 2 × 5$$

Write 90 as a product of its prime factors. 90 = _____

Q11. Circle **all** the **prime factors** of 30

2   3   5   6   10

1 mark

Q12. The numbers in this sequence increase by the same amount each time.

Write the missing numbers.

[   ]   42   49   [   ]   63   [   ]

2 marks

Q13. Write **all** the common multiples of 3 and 8 that are **less than 50**

_____

1 mark

Q14. Olivia counts in eights, starting at zero. Tick **all** the numbers Olivia should say.

24   [   ]

42   [   ]

78   [   ]

112   [   ]

1 mark

Q15. In the circles, write a multiple that belongs to each set. One has been done for you.

numbers from 1 to 99 —— multiple of **10** —— (50)

numbers from 101 to 199 —— multiple of **20** —— ( )

numbers from 201 to 299 —— multiple of **30** —— ( )

2 marks

numbers from 301 to 399 —— multiple of **40** —— ( )