Number - Multiplication and Division Assessment

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Total Marks (out of 40)	

5.1

Name	
Date	

Section 1:

Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.

1 Write these numbers in the correct position on the sorting diagram.

20	16	24	30

	multiple of 5	**not** a multiple of 5
multiple of 6		
not a multiple of 6		

2 marks

2 The factor pairs of 14 are:

1	and	14	
2	and	7	

Write all the factor pairs of 32

	and		
	and		
	and		

2 marks

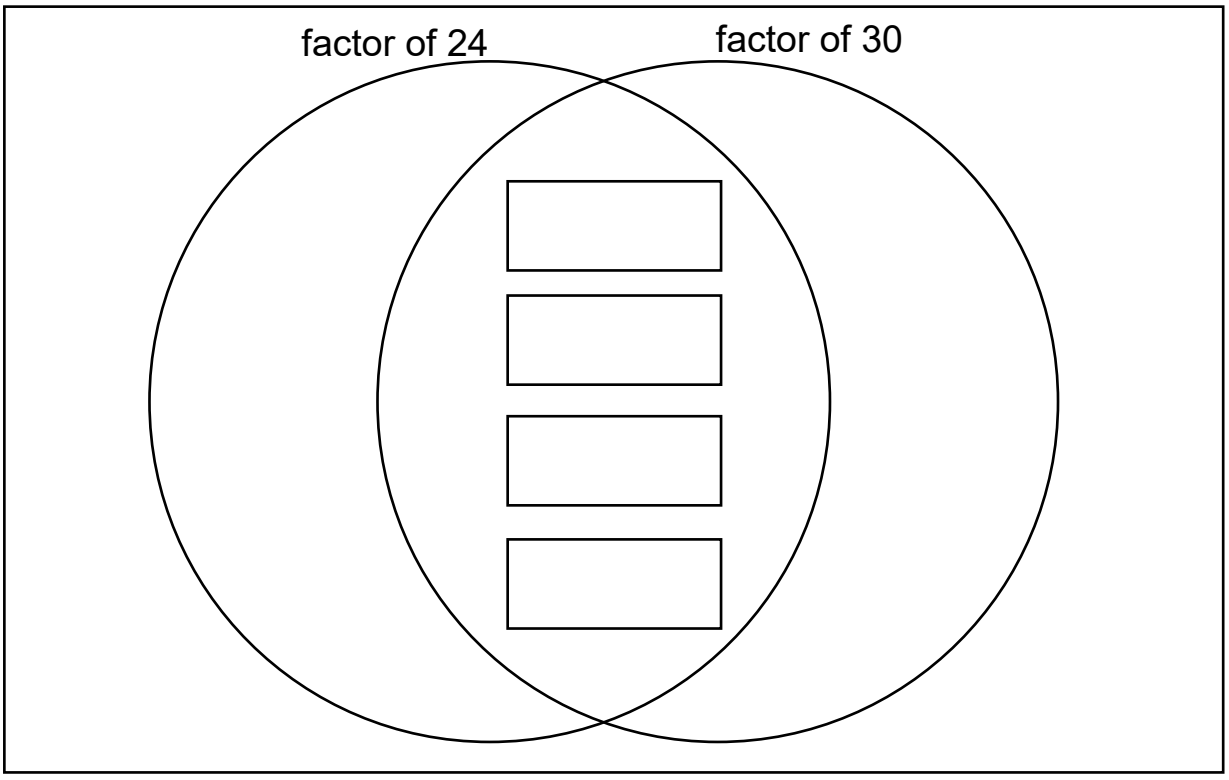
3 Underline all the multiples of 80.

160 280 880 440 320

2 marks

4 There are 4 numbers which are **both** a **factor of 24** **and** a **factor of 30**

Write them in the boxes on the Venn diagram.

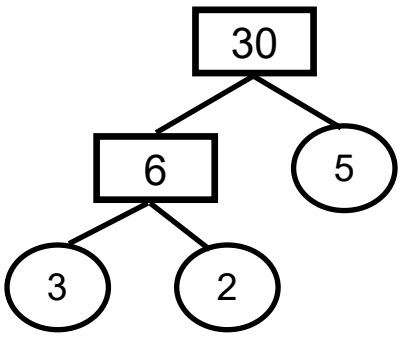


2 marks

Section 2:

Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers *and* establish whether a number up to 100 is prime and recall prime numbers up to 19.

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



$30 = 3 \times 2 \times 5$

Write **42** as a product of its **prime factors**.

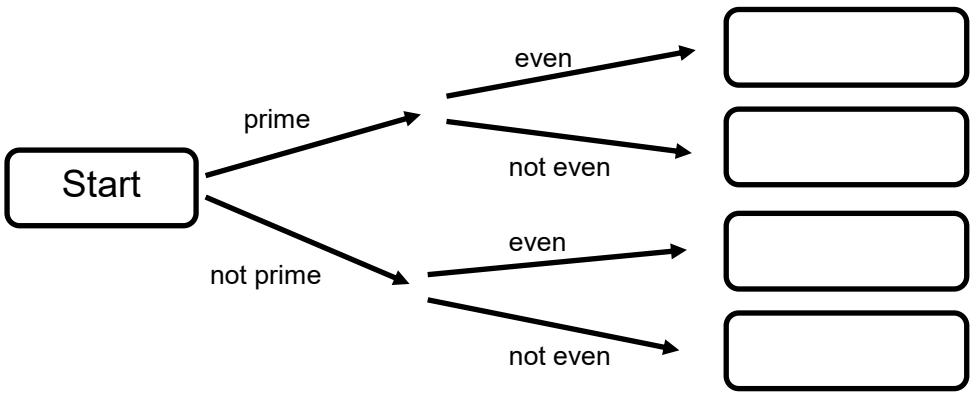
$42 =$

2 marks

6 Here is a diagram for sorting numbers.

Write these three numbers in the correct boxes.

15 16 17



2 marks

7 Marcus thinks of **2 prime numbers**.

He adds them together. His answer is 16.

Write the 2 prime numbers he was thinking of.

☐ and ☐

1 mark

8 **Underline** all the **prime** numbers.

60 61 62 63 64 65 66 67

2 marks

Section 3:

Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.

9 Here are six cards.

x 10	x 100	x 1000	÷ 10	÷ 100	÷ 1000

Use a card to complete each calculation.

42 ☐ = 4200

4.2 ☐ = 0.42

42 ☐ = 0.042

4.2 ☐ = 4200

2 marks

10 Complete these calculations.

307 ÷ 100 = ☐ 60.18 x 10 = ☐

☐ x 10 = 320.6 1900 ÷ ☐ = 100

2 marks

Section 4:

recognise and use square numbers and cube numbers, and the notation for squared (²) and cubed (³)

11 Put a tick next to each **correct** statement.

$5^2 = 5 \times 2$
$5^2 = 5 + 5$
$5^2 = 5 \times 5$
$4^3 = 4 \times 4 \times 4$
$4^3 = 4 + 4 + 4$
$4^3 = 4 \times 3$

2 marks

12 Complete this calculation.

$7^2 - 2^3 =$ ☐

1 mark

13 A square lawn is 12 metres wide.

What is the area of the lawn?

square meters

1 mark

14 I squared a number and got 64.

What number did I start with?

1 mark

Section 5:

multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers

and

divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context

and

solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign

15 Calculate 132 x 6

Show your method

2 marks

16 Calculate 507 x 24

Show your method

2 marks

17 Calculate 2608 ÷ 8

Show your method

2 marks

18 Eggs are packed into boxes of six.

Freeman farm has 853 eggs for packing.

How many boxes can be **filled**?

Show your method

boxes

2 marks

19 Eve buys 400g of Cheddar and 150g of Swiss cheese.

She pays with a £10 note.

Cheddar Cheese

72p per 100g

Swiss Cheese

64p per 100g

How much change does she get?

Show your method

3 marks

20 Look at these signs.

<	=	>

Write the correct sign in each box

$4^2 + 3^2$		5^2
124 x 0		124 ÷ 2
6.04 x 10		0.64 x 100
432 x 12		432 x 4 x 3
10,000		10^3

5 marks