



Worksheet

Name :

Subject:

Math- practice sheet #2 sequences

Class:

Grade 5

Date:

Q1) Here is a part of a sequence.

4, 8, 12, 16, , ,

The sequence continues in the same way.

Complete the sequence, then answer the following questions.

- a) Write down the 1st term of the sequence.....
- b) Write down the 5th term of the sequence.....
- c) Write down the 6th term of the sequence.....
- d) Write down the 10th term of the sequence.....
- e) Write down the 20th term of the sequence.....
- f) What is the term-to-term rule?.....
- g) What is the position to term rule?.....

Q2) Complete the following sequences:

5, 0, -5, __, __, __, __.

Term to term rule _____

20, 10, 0, __, __, __, __.

Term to term rule _____

7, 5, 3, __, __, __, __.

Term to term rule _____

11, 8, 5, __, __, __, __.

Term to term _____

4, 2, 0, __, __, __, __.

Term to term _____

Q3) Here is a part of a sequence.

5	10	15	20			
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The sequence continues in the same way.

Complete the sequence, then answer the following questions.

- a) Write down the 5th term of the sequence.....
- b) Write down the 8th term of the sequence.....
- c) Write down the 10th term of the sequence.....
- d) Write down the 20th term of the sequence.....
- e) Lily says that the number 520 will be in the sequence,

Do you think she is right?

<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
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Explain your answer.

Q4) Write the sequence of square numbers. (1-144).

Q5) Write the sequence of triangular numbers. (1-55)

Q6) Write the sequence of the cube numbers. (1-125)

Q7) Circle all the cube numbers.

1 4 8 25 16 27 49 64 100 125

Q8) Write a square number in each box to make the statement correct.

<input type="text"/>	+	<input type="text"/>	=	<input type="text"/>
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Q9) April 2023 p1

Safia starts at 52 and counts backwards in sevens.
Mia starts at -10 and counts forwards in nines.

Write the number that they both say.

..... [1]

Q10) April 2023 p1

Here is part of a sequence.

.....	1.6	0.4
	2nd term				6th term

The sequence is made by subtracting a constant amount from the previous term.

Write the 8th term.
Show your working.

..... [2]

Q11) April 2023 p2

Here is a table showing the position and the terms of a sequence.

Complete the table.

Position	Term
1	7
2	14
3	21
10
15
.....	350

[2]

Q12) April 2023 p2

Add together the 3rd square number and the 5th square number.

..... [1]

Q13) April 2024 p2

Here are the first five terms in a number sequence.

9 18 27 36 45

Yuri says,



I can keep adding 9 until I get to the 20th term.
I can also calculate the 20th term without using addition.

Write a **calculation** to show how to calculate the 20th term in the sequence **without** using addition.

..... [1]

Q14) April 2024 p2

Hassan makes a sequence by halving square numbers.
He records the numbers in a position-to-term table.

Position	Term
1st	$\frac{1}{2}$
2nd	2
3rd	$4\frac{1}{2}$
4th	8

Write the 8th term in the sequence.

..... [1]

Q15) Oct 2023 p2

Here is part of a sequence.

23, 17, 11, ...

The sequence continues in the same way.

Draw a ring around **all** the numbers that are in the sequence.

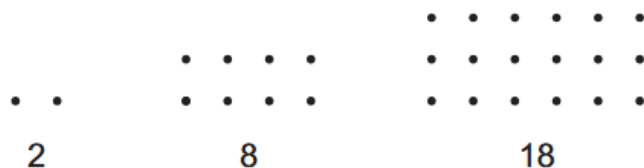
7 -2 -7 -35 -49

[1]

Q16) Oct 2023 p2

Here are the first three terms of a sequence.

Each term is made from the sum of a pair of square numbers.

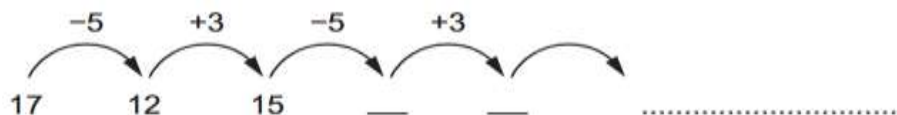


The sequence continues in the same way.

Write the 6th number in the sequence.

Q17) Oct 2024 p1

The sequence continues in the same way.



Rajiv says, 'The number -2 is in my sequence.'

Tick (✓) to show if Rajiv is correct.

☐

Yes

☐

No

Explain how you know.

.....

.....

.....

[1]

Q18) Oct 2024 p2

Jamila writes the sequence of square numbers.

1 4 9 ...

She makes a **new** sequence by squaring each number in the sequence.

1 16 81 ...

Write the 7th term in her **new** sequence.

..... [1]

Q19) April 2025 p1

Here is part of a sequence.

The sequence continues in the same way.

34 27 20 ...

Write the number in the sequence that is between -10 and -20

..... [1]

Safia writes a sequence by counting in steps of 3

The 8th term in her sequence is 32

Gabriella writes a different sequence by counting in steps of 5

The 8th term in her sequence is 64

Write the difference between the first terms in their sequences.

..... [2]

Factors and multiples

Q20) Find all the factors of the following numbers.

a) 15

____, ____, ____, ____

b) 24

____, ____, ____, ____, ____, ____, ____, ____

c) 30

____, ____, ____, ____, ____, ____, ____, ____

d) 12

____, ____, ____, ____, ____, ____

Q21)

a) Find all the common factors of 12 and 15

Find the GCF (Greatest common factor) of 12 and 15.

b) Find all the common factors of 15 and 30

Find the GCF (Greatest common factor) of 15 and 30.

c) Find all the common factors of 6 and 9

Find the GCF (Greatest common factor) of 6 and 9.

Prime numbers are the numbers that has only 2 factors 1 and the number itself.

Prime Numbers

A natural number greater than 1 with no divisors other than 1 and itself.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Remember these facts about Prime Numbers!

There are no even numbers except 2.

There are no prime numbers ending in 5, except 5.

The digits can't add up to 3 except 3 (digital root).

Composite numbers: the numbers that has more than 2 factors.

Q22) Circle all the prime numbers

1 2 6 8 9 10 11 15 17 36 37

Q23) a) Find the first three common multiples of 4 and 5.

Multiples of 4: ____, ____, ____, ____, ____, ____, ____, ____, ____, ____

Multiples of 5: ____, ____, ____, ____, ____, ____, ____, ____, ____, ____

The first common multiple: _____

The first three common multiples: ____, ____, ____,

****Important note: to find the first n common multiples first we list the first 10 multiples then we find the first common multiple and count by the first common multiple.

b) Find the first three common multiples of 3 and 7.

Multiples of 3: ____, ____, ____, ____, ____, ____, ____, ____, ____, ____

Multiples of 7: ____, ____, ____, ____, ____, ____, ____, ____, ____, ____

The first common multiple: _____

The first three common multiples: ____, ____, ____,

c) Find the first three common multiples of 6 and 10.

Multiples of 2: ____, ____, ____, ____, ____, ____, ____, ____, ____, ____

Multiples of 10: ____, ____, ____, ____, ____, ____, ____, ____, ____, ____

The first common multiple: _____

The first three common multiples: ____, ____, ____,

Q24) April 2023 p1

(a) Here is a list of numbers.

1 3 7 11 13 17 21 23 27

Draw a ring around a common **multiple** of 3 and 7

[1]

(b) Here is a list of numbers.

2 4 6 22 24 26 32 34 36

Draw a ring around a common **factor** of 4 and 6

[1]

Divisibility

Understanding divisibility rules can help you quickly determine if a number can be divided by another number without leaving a remainder. These rules are shortcuts that make math easier and faster! For example, knowing if a number is divisible by 2, 3, 4, 5, 6, or 9 helps when simplifying fractions, finding factors, and solving math problems.

- A number is divisible by 2 if it ends in 0, 2, 4, 6, or 8.
- A number is divisible by 3 if the sum of its digits is divisible by 3.
- A number is divisible by 4 if the last two digits form a number divisible by 4.
- A number is divisible by 5 if it ends in 0 or 5.
- A number is divisible by 6 if it is divisible by both 2 and 3.
- A number is divisible by 9 if the sum of its digits is divisible by 9.

Q25) Fill in the blank with the correct words.

1. A number is divisible by 5 if it ends in _____ or _____.
2. If the sum of a number's digits is divisible by _____, then the whole number is divisible by that number.
3. A number is divisible by 2 if its last digit is _____.
4. A number is divisible by 4 if the last _____ digits form a number divisible by 4.
5. If a number is divisible by both 2 and 3, then it is divisible by _____.
6. Tick all the numbers that are divisible by the number on the left.

Number	By 2	By 3	By 4	By 5	By 6	By 9	By 10
3500							
8154							
753							
250							
6933							
252							
8444							

Q26) April 2023 p1

Chen has four digit cards.
He says,

'All the numbers I could make with my four cards are 4-digit numbers that are divisible by 6'

Write four numbers that Chen could have on his cards.

--	--	--	--

[1]

Q27) April 2023 p1

Rajiv and Carlos each choose a set of three prime numbers.
The total of each set of numbers is 30

(a) Write three numbers that Rajiv could choose.

.....

.....

.....

[1]

(b) Write the number that both Rajiv and Carlos **must** have in their set.

.....

Explain your answer.

.....

.....

..... [1]

Q28) April 2024 p1

Carlos uses digit cards to make a four-digit number.
The number is divisible by 9

Write the missing digit in the box.

3	1	4	
---	---	---	--

[1]

Q29) April 2024 p2

Write a two-digit number ending in 7 that is a prime number.

.....

Write a two-digit number ending in 7 that is **not** a prime number.

.....

[1]

Q30 April 2025 p1

A factory makes 9512 tiles.

Ahmed says, 'I can divide the tiles equally between 4 boxes.'

Tick (✓) to show if Ahmed is correct.

Yes ☐ No ☐

Explain how you know.

.....
.....
..... [1]

Q31) April 2025 p1

Write **all** the 4-digit numbers between 3310 and 3325 that are divisible by 9

..... [1]

Q32) April 2025 p1

Here is a sequence.

The sequence continues the same way.

Position	1	2	3	4	5
Term	4	8	12	16	20

Write the **position** of the first term in this sequence that is greater than 100 and is divisible by 6

[1]

Q33) April 2025 p1

Complete the table.

	Common factor	Common multiple
4 and 10
..... and	5	30

[2]

Q34) Oct 2023 p1

Lily has four digit cards.

3	4	5	6
---	---	---	---

Lily uses the cards to make a 3-digit number that is divisible by 6

Write **all** the different numbers Lily could make.

.....
 [2]

Q35) Oct 2024 p1

Here are four digits.

1 1 2 6

Use **all** the digits to write a four-digit number that is divisible by 4

..... [1]

Q36) Oct 2024 p1

Draw a ring around **each** of the numbers that are factors of 2664

2 3 4 5 6 8 9 10

[2]

Q37) Oct 2024 p2

(a) Write the **largest** number that is a factor of both 36 and 48

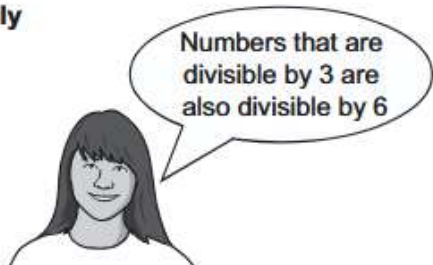
.....
[1]

(b) Write the **smallest** number that is a multiple of both 36 and 48

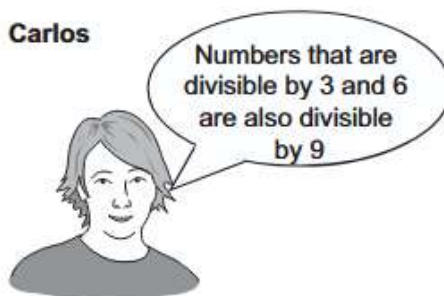
.....
[1]

Q38) These children make some statements about numbers.

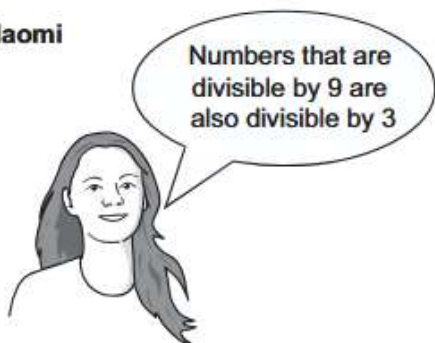
Lily



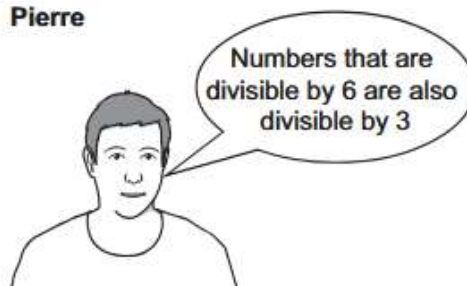
Carlos



Naomi



Pierre



Write the names of the children who are correct.

[2]

Q39) Oct 2024 p1

Lily and Samira count on in steps of constant size.

They both start at the **same** number.

Here is part of Lily's sequence.

1st number	2nd number	3rd number	4th number
	7		15

Here is part of Samira's sequence.

1st number	2nd number	3rd number	4th number
		6	

Write the 4th number in Samira's sequence.

[1]

Q40)

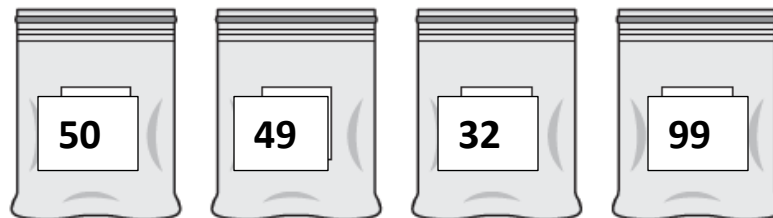
Hassan has some bags of unit cubes.
The labels show the number of unit cubes in each bag.



Hassan chooses one bag.
He uses **all** the cubes in the bag to make a larger cube.

Tick (✓) the bag Hassan chooses.

Hassan has some bags of **Squares** .
The labels show the number of **Squares** in | each bag.



Hassan chooses one bag.
He uses **all** the **Squares in the bag** | to make a larger **Square**

Tick (✓) the bag Hassan chooses.

Q41)

Calculate the difference between 5^3 and 5^2

.....