

Patterning - Number Patterns Practice

- 1** Find the term that would complete this repeating pattern in the missing space

?, 8, 4, 8, 4, 8, 4

A

8

B

4

- 2** Find the term that would complete this repeating pattern in the missing space

0, 1, 0, ?, 1, 0, 0, 1, 0, 0, 1

A

1

B

0

- 3** Find the term that would complete this repeating pattern in the missing space

4, 9, 3, 4, 9, ?, 4, 9, 3, 4

A

3

B

9

C

4

- 4** Find the term that would complete this repeating pattern in the missing space

0, 0, 3, 0, 0, 0, 3, 0, 0, 0, ?, 0, 0, 0

A

0

B

3

- 5** Find the term that would complete this repeating pattern in the missing space

3, 9, 3, 1, 3, 9, 3, 1, 3, ?, 3, 1, 3, 9

A

1

B

3

C

9

- 6** Find the term that would complete this repeating pattern in the missing space

8, ?, 9, 0, 8, 1, 9, 0, 8, 1, 9, 0, 8, 1

A

9

B

0

C

8

D

1

- 7** Find the term that would be next in this repeating pattern

4, 3, 4, 3, 4, 3, 4, ?

A

3

B

4

- 8** Find the term that would be next in this repeating pattern

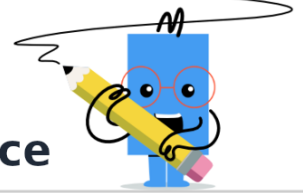
3, 3, 9, 3, 3, 9, 3, 3, 9, ?

A

9

B

3



Patterning - Number Patterns Practice

9 Find the term that would be next in this repeating pattern

6, 3, 3, 6, 6, 3, 3, 6, 6, 3, 3, 6, ?

A

3

B

6

10 Find the term that would complete this increasing pattern in the missing space

1, 3, ?, 7, 9

A

7

B

11

C

6

D

4

E

5

F

3

11 Find the term that would complete this decreasing pattern in the missing space

12, ?, 8, 6, 4

A

11

B

15

C

12

D

10

E

6

F

16

12 Find the term that would be next in this increasing pattern

2, 4, 6, ?

A

8

B

4

C

3

D

9

E

11

F

14

13 Find the term that would be next in this repeating pattern

0, 2, 3, 0, 2, 3, 0, 2, 3, ?

A

2

B

3

C

0

14 Find the term that would be next in this repeating pattern

0, 8, 0, 7, 0, 8, 0, 7, 0, 8, 0, 7, ?

A

8

B

7

C

0

15 Find the term that would be next in this repeating pattern

9, 7, 5, 2, 9, 7, 5, 2, 9, 7, 5, 2, 9, ?

A

5

B

2

C

7

D

9

16 Find the term that would complete this increasing pattern in the missing space

?, 7, 11, 15, 19

A

8

B

3

C

-2

D

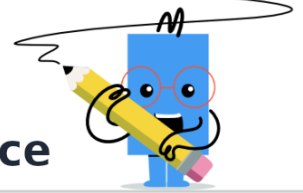
9

E

1

F

4



Patterning - Number Patterns Practice

- 17** Find the term that would complete this decreasing pattern in the missing space

?, 20, 14, 8

A 27	B 26	C 29
D 28	E 30	F 22

- 18** Find the term that would be next in this decreasing pattern

17, 14, 11, 8, ?

A 6	B 3	C 2
D 11	E 9	F 5

- 19** Find the term that would be next in this increasing pattern

3, 8, 13, ?

A 19	B 17	C 16
D 21	E 18	F 13

- 20** Find the term that would be next in this decreasing pattern

27, 22, 17, 12, ?

A 11	B 8	C 10
D 9	E 13	F 7

- 21** Find the term that would be next in this place value pattern

4 40 400 4,000 ?

A 4,000	B 40
C 400,000	D 400
E 40,000	F 40,000,000

- 22** Find the term that would be next in this place value pattern

3 300 30,000 ?

A 3,000,000,000	B 3,000
C 30,000,000	D 3,000,000
E 300,000,000	F 300,000

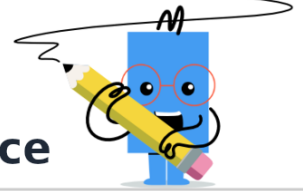
- 23** Find the term that would complete this place value pattern in the missing space

4 ? 400 4,000 28 ? 28,000,000 28,000,000,0

A 4,000	B 40,000
C 400	D 4
E 40	F 0

- 24** Find the term that would complete this place value pattern in the missing space

A 280	B 28,000
C 280,000	D 2,800,000
E 2,800	F 28



Patterning - Number Patterns Practice

- 25** Find the term that would complete this geometric pattern in the missing space

?, 3, 9, 27, 81, 243

A 14	B 16	C 4
D 21	E 1	F 26

- 26** Find the term that would complete this geometric pattern in the missing space

?, 5, 25, 125

A 4	B 19	C 24
D 31	E 16	F 1

- 27** A fibonacci pattern is made by adding the previous 2 term together to get the next term. Find the term that would be next in this fibonacci pattern

1, 3, 4, 7, 11, ?

A 24	B 14	C 21
D 20	E 18	F 15

- 28** Find the term that would complete this geometric pattern in the missing space

?, 12, 48, 192

A 17	B 12	C 18
D 8	E 3	F 13

- 29** A fibonacci pattern is made by adding the previous 2 term together to get the next term. Find the term that would be next in this fibonacci pattern

2, 3, 5, 8, 13, ?

A 25	B 19	C 23
D 21	E 27	F 20

- 30** Skip count upwards by 3

6, 9, 12, 15, __, __

A 18, 20	B 18, 22
C 19, 21	D 19, 23
E 19, 22	F 18, 21

- 31** What are the next 3 numbers in the pattern, skip counting upwards by 5

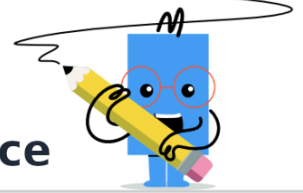
5, 10, 15, __, __, __

A 20, 25, 30	B 19, 24, 29
C 21, 25, 29	D 20, 24, 28
E 21, 27, 33	F 21, 26, 31

- 32** Skip count upwards by 3

3, 6, __, __, 15, 18

A 10, 14	B 9, 13
C 9, 12	D 10, 13
E 9, 11	F 8, 11

**Patterning - Number Patterns Practice****33** Skip count upwards by 4**4, 8, __, __, __, 24, 28**

- | | |
|--------------|--------------|
| A 13, 16, 19 | B 11, 15, 19 |
| C 12, 17, 22 | D 13, 17, 21 |
| E 13, 18, 23 | F 12, 16, 20 |

34 Skip count upwards by 30**30, 60, __, __, 150, 180**

- | | |
|------------|-----------|
| A 100, 120 | B 90, 130 |
| C 80, 110 | D 90, 120 |
| E 100, 140 | F 90, 110 |

35 Skip count upwards by 40**40, 80, __, __, __, 240, 280**

- | | |
|-----------------|-----------------|
| A 120, 160, 200 | B 130, 170, 210 |
| C 120, 170, 220 | D 120, 150, 180 |
| E 130, 160, 190 | F 130, 180, 230 |

36 Skip count downwards by 5**35, 30, 25, 20, __, __**

- | | |
|----------|----------|
| A 15, 9 | B 16, 12 |
| C 14, 9 | D 15, 11 |
| E 15, 10 | F 16, 10 |

37 What are the next 3 numbers in the pattern, skip counting downwards by 6**42, 36, 30, __, __, __**

- | | |
|--------------|--------------|
| A 25, 20, 15 | B 24, 18, 12 |
| C 24, 17, 10 | D 24, 19, 14 |
| E 25, 19, 13 | F 23, 17, 11 |

38 Skip count downwards by 5**40, 35, __, __, 20, 15**

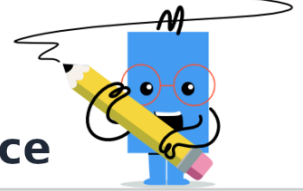
- | | |
|----------|----------|
| A 29, 24 | B 30, 25 |
| C 30, 26 | D 30, 24 |
| E 31, 27 | F 31, 26 |

39 Skip count downwards by 4**32, 28, __, __, __, 12, 8**

- | | |
|--------------|--------------|
| A 24, 21, 18 | B 25, 22, 19 |
| C 24, 19, 14 | D 25, 21, 17 |
| E 24, 20, 16 | F 25, 20, 15 |

40 Skip count downwards by 40**320, 280, __, __, 160, 120**

- | | |
|------------|------------|
| A 240, 210 | B 250, 210 |
| C 240, 190 | D 240, 200 |
| E 250, 200 | F 250, 220 |



Patterning - Number Patterns Practice

41 Skip count downwards by 40

360, 320, __, __, __, 160, 120

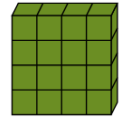
A 270, 230, 190 B 290, 240, 190

C 290, 260, 230 D 290, 250, 210

E 280, 250, 220 F 280, 240, 200

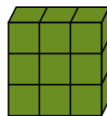
42 Find the term that would complete this quadratic pattern in the missing space ?, 4, 9, 16

?



A 1	B 19	C 21
D 31	E 16	F 24

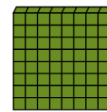
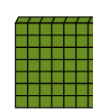
43 Find the term that would be next in this quadratic pattern
1, 4, 9, ?



?

A 11	B 1	C 36
D 16	E 31	F 26

44 Find the terms shown in this quadratic pattern
25, 36, 49, 64

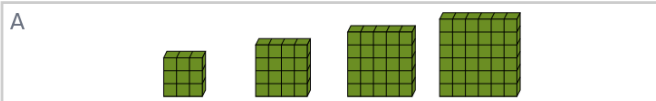


A 23, 22,
21, 20

B 25, 36,
49, 64

45 Which picture shows this quadratic pattern?

16, 25, 36, 49



46 Choose the rule that describes this increasing pattern

3, 7, 11, 15

A Start at 3 and subtract 4 for each term

B Start at 3 and add 5 for each term

C Start with 3 and 7. Add the prior two terms for each subsequent term

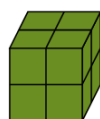
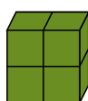
D Start at -1 and add 4 for each term

E Start at 3 and add 4 for each term

F Start at 3 and multiply by 4 for each term

47 Find the term that would complete this geometric pattern in the missing space ?, 2, 4, 8

?



A 31	B 6	C 9
D 14	E 16	F 1

48 Choose the rule that describes this decreasing pattern

15, 12, 9, 6

A Start at 15 and subtract 3 for each term

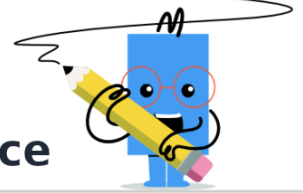
B Start at 15 and add 3 for each term

C Start at 18 and subtract 3 for each term

D Start at 15 and multiply by 3 for each term

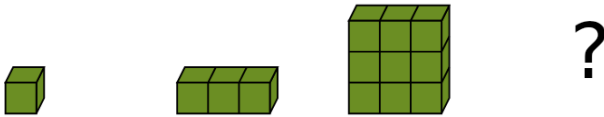
E Start at 15 and subtract 4 for each term

F Start at 13 and subtract 3 for each term



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49 Find the term that would be next in this geometric pattern
1, 3, 9, ?



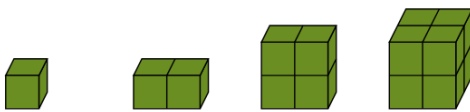
A	47	B	7	C	12
D	27	E	22	F	57

50 Find the term for $n=6$ in this increasing pattern (first term is $n=1$)

3, 9, 15, 21

A	31	B	30
C	33	D	36
E	35	F	23,328

51 Find the terms shown in this geometric pattern
1, 2, 4, 8



A	2, 5, 8
B	1, 2, 4, 8

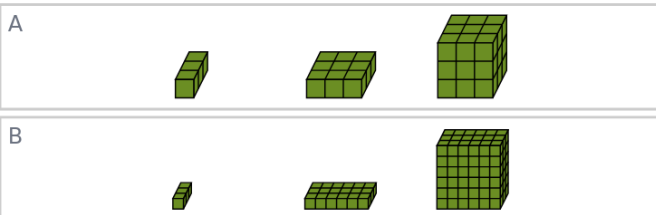
52 Find the term for $n=5$ in this decreasing pattern (first term is $n=1$)

58, 54, 50, 46

A	38	B	43	C	74
D	44	E	42	F	40

53 Which picture shows this geometric pattern?

3, 9, 27



54 Choose the first values that this pattern rule would create

Start at 1 and add 3 for each term

A	1, 3, 9, 27, 81	B	3, 6, 9, 12, 15
C	1, -2, -5, -8, -11	D	1, 4, 5, 9, 14
E	-1, 2, 5, 8, 11	F	1, 4, 7, 10, 13

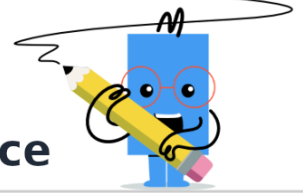
55 Choose the first values that this pattern rule would create
Start at 27 and subtract 5 for each term

A	29, 24, 19, 14, 9	B	27, 24, 21, 18, 15
C	27, 22, 17, 12, 7	D	31, 26, 21, 16, 11
E	27, 32, 59, 91, 150	F	27, 18, 9, 0, -9

56 Choose the first values that this equation would create starting with $n=1$

$$a_n = 2 + 3(n - 1)$$

A	2, 6, 18, 54	B	2, 2, 2, 2
C	2, 7, 12, 17	D	3, 6, 9, 12
E	2, 5, 7, 12	F	2, 5, 8, 11



Patterning - Number Patterns Practice

- 57** Choose the first values that this equation would create starting with $n=1$

$$a_n = 28 - 5(n - 1)$$

A 27, 22, 17, 12, 7

B 28, 33, 61, 94, 155

C 25, 20, 15, 10, 5

D 28, 26, 24, 22, 20

E 28, 21, 14, 7, 0

F 28, 23, 18, 13, 8

- 58** Find the ones digit of this number

$$1^5$$

A 3	B 8	C 4
D 9	E 1	F 5

- 59** Find the ones digit of this number

$$1^8$$

A 2	B 6	C 0
D 4	E 5	F 1

- 60** Find the term that would complete this Fibonacci pattern in the missing space
3, 3, 6, 9, ?

9	6
3	3
?	

A 10	B 24	C 5
D 9	E 8	F 15

- 61** Find the ones digit of this number

$$83^0$$

A 0	B 8	C 1
D 4	E 2	F 5

- 62** Find the term that would be next in this Fibonacci pattern
3, 3, 6, 9, 15, ?

9	6
3	3
15	?

A 16	B 8	C 26
D 28	E 18	F 24

- 63** Find the ones digit of this number

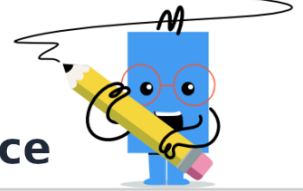
$$33^3$$

A 8	B 1	C 5
D 3	E 2	F 7

- 64** Find the terms shown in this Fibonacci pattern
3, 3, 6, 9, 15, 24, 39

39
9 6
3 3
15 24

A 1, 2, 4
B 3, 3, 6, 9, 15, 24, 39



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65 Find the ones digit of this number

$$47^7$$

A	B	C
8	5	6
D	E	F
1	4	3

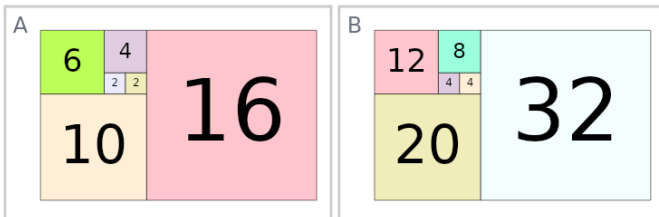
66 Find the ones digit of this number

$$5^{78}$$

A	B	C
6	2	5
D	E	F
8	3	1

67 Which picture shows this Fibonacci pattern?

2, 2, 4, 6, 10, 16



68 Find the ones digit of this number

$$9^{42}$$

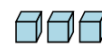
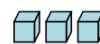
A	B	C
6	1	4
D	E	F
7	8	9

69 Find the ones digit of this number

$$7^{41}$$

A	B	C
0	2	5
D	E	F
3	4	7

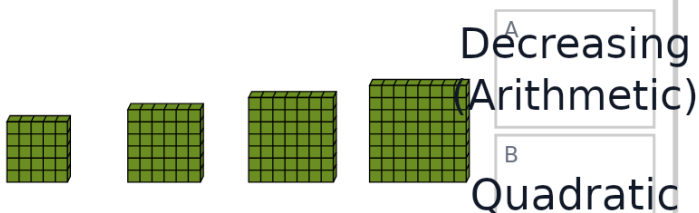
70 What type of pattern is shown here?
3, 1, 3, 1



A
Geometric

B
Repeating

71 What type of pattern is shown here?
25, 36, 49, 64

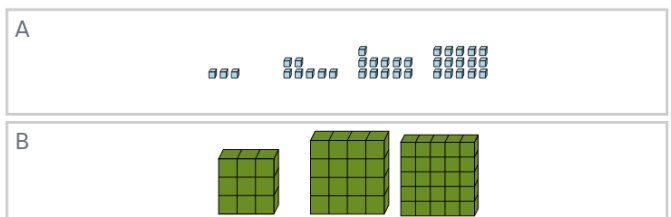


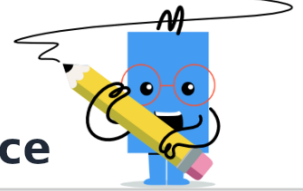
A
Decreasing (Arithmetic)

B
Quadratic

72 Which image shows an increasing pattern

Increasing (Arithmetic)





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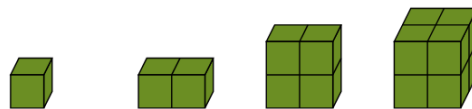
73 Which image shows a geometric pattern

Geometric

A



B



74 What pattern type do these numbers form?

3, 5, 3, 5

A

Fibonacci

B

Repeating

75 What pattern type do these numbers form?

16, 25, 36, 49

A

Quadratic

B

Repeating

76 Which numbers form this type of pattern?

Repeating

A

5, 4, 5, 4

B

1, 2, 3, 5, 8, 13

77 Which numbers form this type of pattern?

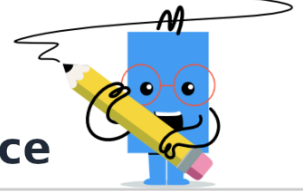
Fibonacci

A

2, 2, 4, 6, 10, 16, 26

B

1, 5, 9



Patterning - Number Patterns Practice

78 Which rule describes this type of pattern?

Repeating

A Start at 1 and multiply by 1 for each term

B Find that 4, 8 repeats and repeat those numbers

79 Which rule describes this type of pattern?

Place Value

A Start at 3 and multiply by 10 for each term

B Start with 1 and 2. Add the prior two terms for each subsequent term

80 What is the rule for this pattern?

3, 6, 9, 12



A Start at 3 and add 3 for each term

B Start at 1 and multiply by 1 for each term