

Determine the common difference of an arithmetic sequence

1

8, 12, 16, 20, __, __

A 24, 28

B 24, 29

C 23, 27

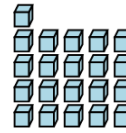
D 25, 29

E 24, 27

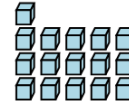
F 25, 28

2

21, 16, 11, ?



1



2



3

?

4

A 6

B 5

C 11

D 2

E 7

F 0

3

?, 7, 11, 15

?



1



2

3



4

A 7

B 10

C 1

D 3

E 5

F 9

4

Start at 3 and add 4 for each term

A 3, 8, 13, 18, 23

B 3, 4, 5, 6, 7

C 3, -1, -5, -9, -13

D 3, 7, 11, 15, 19

E 3, 11, 19, 27, 35

F 3, 12, 48, 192, 768

5What are the first 3 terms, starting with $b = 1$ in this number sequence

$$b + 5$$

A 6, 7, 8

B -4, -3, -2

C 13, 18, 23

D 14, 23, 32

E 15, 23, 31

F 14, 22, 30

6

1, 7, 13, ?

A 20

B 25

C 18

D 14

E 19

F 21

7

3, ?, 7, 9

A 4

B 8

C 9

D 6

E 5

F 2

8

31, 25, 19, 13, ?

A 12

B 8

C 7

D 4

E 13

F 6

**Determine the common difference of an arithmetic sequence****9**

26, ?, 16, 11, 6

A 25	B 19	C 21
D 24	E 17	F 18

10

1, 4, 7, 10

A Start at 1 and add 3 for each term	B Start at 1 and multiply by 3 for each term
C Start with 1 and 4. Add the prior two terms for each subsequent term	D Start at 2 and add 3 for each term
E Start at -1 and add 3 for each term	F Start at 1 and add 2 for each term

11

2, 8, 14, 20, 26

A $a_n = -1 + 6(n - 1)$	B $a_n = 2 + 6(n)$
C $a_n = 2 + 2(n - 1)$	D $a_n = 2 + 10(n - 1)$
E $a_n = 2 + 3(n - 1)$	F $a_n = 2 + 6(n - 1)$

12

8, 14, 20

A $8y + 2$	B $3y + 2$
C $6y + 0$	D $6y + 1$
E $6y + -1$	F $6y + 2$

13

Find the rule that describes this pattern equation

$$a_n = 10 - 2(n - 1)$$

A Start at 11 and subtract 2 for each term	B Start at 10 and add 2 for each term
C Start at 10 and subtract 4 for each term	D Start at 10 and subtract -2 for each term
E Start at 10 and subtract 2 for each term	F Start at 10 and multiply by 2 for each term