1. Insert the missing number. 12, 25, 49, 99, 197, 395, (...)
A. 789 B. 1579
C. 722 D. 812
Hide Answer
|
| Discuss
Notebook
Here is the answer and explanation
Answer : Option A
Explanation :
Each number is twice the previous one with 1 added or subtracted alternatively.

2.Insert the missing number. 34, 7, 37, 14, 40, 28, 43, (...)
A. 31 B. 42
C. 46 D. 56
Hide Answer
|
| Discuss
Notebook
Here is the answer and explanation
Answer : Option D
Explanation :
We
34,
7,
have
37,
14,
two
40,
43,
28,
series
...
...
Hence, next term is 28 × 2 = 56

3. Find the missing number. 1, 4, 9, 16, 25, 36, 49, (....)
A. 64 B. 54
C. 56 D. 81
(Increase
(Multiply
here
by
by
3)
2)Hide Answer
|
| Discuss
Notebook
Here is the answer and explanation
Answer : Option A

Explanation :
The
series
1 2 ,
is
2 2 ,
3 2 ,
4 2 ,
5 2 ,
6 2 ,
7 2 ,
...
Hence, next term = 8 2 = 64

4. Insert the missing number. 2, 7, 10, 22, 18, 37, 26
A. 42 B. 52
C. 46 D. 62
Hide Answer
|
| Discuss
Notebook
Here is the answer and explanation
Answer : Option B
Explanation :
There
2,
7,
are
10,
22,
18,
37,
Hence, next term is 37+15 = 52

5. 4, 12, 48, 240, 1440, (...)
A. 7620 B. 10080
C. 6200 D. 10020
Hide Answer
|
| Discuss
Notebook
Here is the answer and explanation
Answer : Option B
two
26,
...
series
...
(Increase here by 15)
(Increase here by 8)
Explanation :
Go on multiplying the given numbers by 3, 4, 5, 6, 7

6 A starts business with Rs. 3500 and after 5 months, B joins with A as his partner. After a year, the . profit is divided in the ratio 2 : 3. What is B's contribution in the capital?
A. Rs. 7500
B. Rs. 8000
C. Rs. 8500D. Rs. 9000
Answer: Option D
Explanation:
Let B's capital be Rs. x.
3500 x 12 2
=
7x
3
14x = 126000
Then,
x = 9000.

7. If (2 32 + 1) is completely divisible by a whole number, which of the following numbers is completely divisible by this number?
A. (2 96 + 1) B. (7 × 2 23)
C. (2 16 - 1)
Hide Answer
|
| Discuss
Notebook
answer with explanation D. (2 16 + 1)
Answer: Option A
Explanation:
Let 232=x
.
Then (232+1)=(x+1)
Assume that (x+1) is completely divisible by a whole number, N
(296+1)=(232)3+1=(x3+1)=(x+1)(x2−x+1)
if (x+1) is completely divisible by N, (x+1)(x2−x+1) will also be divisible by N
Hence (296+1)
is completely divisible N

8. How many of the following numbers are divisible by 132?
264, 396, 462, 792, 968, 2178, 5184, 6336A. 4
C. 6
Hide Answer
|
| Discuss
Notebook
answer with explanation
B. 3
D. 8
Answer: Option A
Explanation:
If a number is divisible by two co-prime numbers, then the number is divisible by their product also.
If a number is divisible by more than two pairwise co-prime numbers, then the number is divisible

by their product also. (read more)
If a number is divisible by another number, then it is also divisible by all the factors of that number. (read more)
132 = 3 × 4 × 11 where 3, 4 and 11 are pairwise co-prime numbers. Also, 3,4 and 11 are factors of 132. Hence,
(1) if a number is divisible by 3, 4 and 11, the number will be divisible by their product 132 also.
(2) If a number is not divisible by 3 or 4 or 11, it is not divisible by 132
You must learn Divisibility Rules to say whether a given number is divisible by another number without actually performing the division. Please go through divisibility rules before proceeding further.
264 is divisible by 3, 4 and 11
=> 264 is divisible by 132
396 is divisible by 3, 4 and 11
=> 396 is divisible by 132
462 is divisible by 3 and 11, but not divisible by 4
=> 462 is not divisible by 132
792 is divisible by 3, 4 and 11
=> 792 is divisible by 132
968 is divisible by 4 and 11, but not divisible by 3
=> 968 is not divisible by 132
2178 is divisible by 3 and 11, but not divisible by 4=> 2178 is not divisible by 132
5184 is divisible by 3 and 4, but not divisible by 11
=> 5184 is not divisible by 132
6336 is divisible by 3, 4 and 11
=> 6336 is divisible by 132
Hence, only 264, 396 ,792 and 6336 are divisible by 132. So the answer is 4

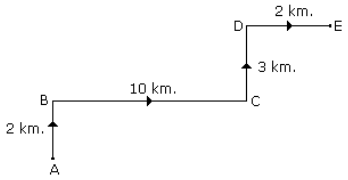
9. All prime numbers are odd numbers
A. True
B. False
Hide Answer
|
| Discuss
Notebook
answer with explanation
Answer: Option B
Explanation:
2 is even prime number

10. What is the unit digit in (6324)1797×(615)316×(341)476 ?
A. 1 B. 2
C. 4 D. 0
Hide Answer
|
| Discuss
Notebook
answer with explanation
Answer: Option D
Explanation:
unit digit in (6324) 1797
= unit digit in (4) 1797
= unit digit in [(4 2) 898 × 4]

= unit digit in [16 898 × 4]
= unit digit in (6 × 4)
= 4
unit digit in (615) 316
= unit digit in (5) 316
= 5unit digit in (341) 476
= unit digit in (1) 476
= 1
Hence, unit digit in (6324) 1797 × (625) 316 × (341) 476
= unit digit in [4 × 5 × 1]
= 0

11. 5216 × 51 = ?
A. 266016 B. 212016
C. 266436 D. 216314
Hide Answer
|
| Discuss
Notebook
answer with explanation
Answer: Option A
Explanation:
Normal way of multiplication may take time. Here is one alternative.
5216×51=(5216×50)+5216=(5216×1002)+5216=5216002+5216=260800+5216=266016

12 A man walks 2 km towards North. Then he turns to East and walks 10 km. After this he turns to . North and walks 3 km. Again he turns towards East and walks 2 km. How far is he from the starting point?
A. 10 km
B. 13 km
C. 15 km
D. None of these
Answer: Option B
Explanation:

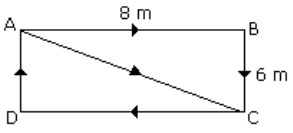


Required distance = AE

$= \sqrt{5^2 + 12^2}$

= 13 km.

13 The length and breadth of a room are 8 m and 6 m respectively. A cat runs along all the four . walls and finally along a diagonal order to catch a rat. How much total distance is covered by the cat?
A.10
B. 14
C. 38
D.48Answer: Option C
Explanation:



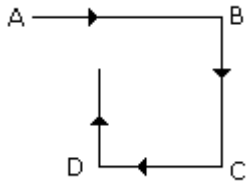
Required distance $= 8 + 6 + 8 + 6 + \sqrt{8^2 + 6^2}$

$= 28 + \sqrt{100}$

= 28 + 10

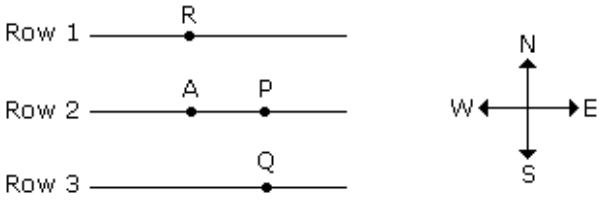
= 38 m

14 One morning sujata started to walk towards the Sun. After covering some distance she turned to . right then again to the right and after covering some distance she again turns to the right. Now in which direction is she facing?
A. North
B. South
C. North-East
D. South-West
Answer: Option A
Explanation:



Hence finally Sujata will face towards North.

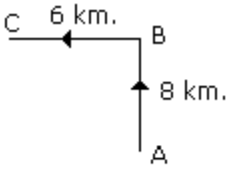
15 Some boys are sitting in three rows all facing North such that A is in the middle row. P is just to . the right of A but in the same row. Q is just behind of P while R is in the North of A. In which direction of R is Q?
A. South
B. South-West
C. North-East
D. South-East
Answer: Option D
Explanation:



Q is in South-East of R.

16 One morning after sunrise, Vimal started to walk. During this walking he met Stephen who was . coming from opposite direction. Vimal watch that the shadow of Stephen to the right of him (Vimal). To Which direction Vimal was facing?
A.East
B. West
C. South
D.Data inadequate
Answer: Option C
Explanation:
Sun rises in the east. So the shadow of a man will always falls towards the west. Since the shadow of Stephen is to the right of Vimal. Hence Vimal is facing towards South.

17 Golu started from his house towards North. After covering a distance of 8 km. he turned towards . left and covered a distance of 6 km. What is the shortest distance now from his house?
A. 10 km.
B. 16 km.
C. 14 km
D. 2 km.Answer: Option A
Explanation:



Required distance = AC

$= \sqrt{8^2 + 6^2}$

$= \sqrt{64 + 36}$

$= \sqrt{100}$

= 10 km.

18. Find the odd man out. 445, 221, 109, 46, 25, 11, 4

A. 25 B. 109

C. 46 D. 221

Here is the answer and explanation

Answer : Option C

Explanation :

To obtain next number, subtract 3 from the previous number and divide the result by 2

445

(445-3)/2 = 221

(221-3)/2 = 109

(109-3)/2 = 53

(53-3)/2 = 25

(25-3)/2 = 11

(11-3)/2 = 4

Clearly, 53 should have come in place of 46

19. Find the odd man out. 1050, 510, 242, 106, 46, 16, 3

A. 46 B. 106

C. 510 D. 1050

Hide Answer
| | Discuss
Notebook
Here is the answer and explanation

Answer : Option B

Explanation :

1050

(1050 - 30)/2 = 510

(510 - 26)/2 = 242

(242 - 22)/2 = 110

(110 - 18)/2 = 46

(46- 14)/2 = 16

(16- 10)/2 = 3

Hence, 110 should have come in place of 106

20. Find the odd man out. 2, 3, 5, 9, 12, 17, 23

A. 12 B. 9

C. 23 D. 2

Hide Answer
| | Discuss
Notebook
Here is the answer and explanation

Answer : Option B

Explanation :

2

2	+	1	=	3
3	+	2	=	5
5	+	3	=	8
8	+	4	=	12
12	+	5	=	17
17	+	6	=	23

ie, 8 should have come in place of 9