Eine	l the odd more put	1			
Find 1.	3, 5, 11, 14, 17, 21	6. 1, 4, 9, 16, 23, 25, 36			
	<b>A.</b> 21 <b>B.</b> 17	<b>A.</b> 9 <b>B.</b> 23			
	<b>C.</b> 14 <b>D.</b> 3	<b>C.</b> 25 <b>D.</b> 36			
	Answer: Option C	Answer: Option B			
	<b>Explanation:</b> Each of the numbers except 14 is an odd number.	<b>Explanation:</b> Each of the numbers except 23, is perfect square.			
	The number '14' is the only EVEN number.	7. 1, 4, 9, 16, 20, 36, 49			
2.	8, 27, 64, 100, 125, 216, 343	<b>A.</b> 1 <b>B.</b> 9			
	<b>A.</b> 27 <b>B.</b> 100	<b>C.</b> 20 <b>D.</b> 49			
	<b>C.</b> 125 <b>D.</b> 343	Answer: Option C			
	Answer: Option B	<b>Explanation:</b> The pattern is $1^2$ , $2^2$ , $3^2$ , $4^2$ , $5^2$ , $6^2$ , $7^2$ . But, instead of $5^2$ , it is 20 which to be turned out.			
	<b>Explanation:</b> The pattern is $2^3$ , $3^3$ , $4^3$ , $5^3$ , $6^3$ , $7^3$ . But, 100 is not a perfect cube.	8. 2, 5, 10, 17, 26, 37, 50, 64			
3.	10, 25, 45, 54, 60, 75, 80	<b>A.</b> 50 <b>B.</b> 26			
	<b>A.</b> 10 <b>B.</b> 45	<b>C.</b> 37 <b>D.</b> 64			
	<b>C.</b> 54 <b>D.</b> 75	Answer: Option D			
	Answer: Option C	<b>Explanation:</b> $(1*1)+1$ , $(2*2)+1$ , $(3*3)+1$ , $(4*4)+1$ , $(5*5)+1$ , $(6*6)+1$ , $(7*7)+1$ , $(8*8)+1$			
	<b>Explanation:</b> Each of the numbers except 54 is multiple of 5.	But, 64 is out of pattern.			
4.	396, 462, 572, 427, 671, 264	A. 26 B. 24			
	<b>A.</b> 396 <b>B.</b> 427	<b>C.</b> 21 <b>D.</b> 18			
	<b>C.</b> 671 <b>D.</b> 264				
	Answer: Option <b>B</b>	Answer: Option C			
	<b>Explanation:</b> In each number except 427, the middle digit is the sum of other two	<ul> <li>Explanation: Each of the numbers except 21 is an even number.</li> <li>10. 16, 25, 36, 72, 144, 196, 225</li> </ul>			
_		<b>A.</b> 36 <b>B.</b> 72			
5.	6, 9, 15, 21, 24, 28, 30 A. 28 B. 21	<b>C.</b> 196 <b>D.</b> 225			
	<b>C.</b> 24 <b>D.</b> 30	Answer: Option <b>B</b>			
	Answer: Option A	<b>Explanation:</b> Each of the numbers except 72 is a perfect square			
	Explanation: Each of the numbers except 28, is a	square.			

												2
11.	331, 48	32, 551, 263, 383,	362, 284		Find 1. 5	l out th 582, 60	e wrong 5, 588,	g numbe 611, 63	er in th 4, 617	e give , 600	en sequence of r	numbers.
	А.	263	В.	383		А.	634	В.	611			
	C.	331	D.	551		C.	605	D.	600			
	Answe	r: Option <b>B</b>										
	<b>Explanation:</b> In each number except 383, the product of first and third digits is the middle one.				Answer: Option A Explanation: Alternatively 23 is added and 17 is							
12.	. 835, 734, 642, 751, 853, 981, 532				subtracted from the terms. So, 634 is wrong. 2. 22, 33, 66, 99, 121, 279, 594							
	<b>A.</b>	751	В.	853		А.	33			B.	121	
	C.	981	D.	532		C.	279			D.	594	
	Answer: Option A				Answer: Option C							
	<b>Explanation:</b> In each number except 751, the difference of third and first digit is the middle one.				<ul> <li>Explanation: Each of the number except 279 is a multiple of 11.</li> <li>3. 8, 13, 21, 32, 47, 63, 83</li> </ul>							
13.	41, 43,	47, 53, 61, 71, 73	, 81			А.	47	В.	63			
	А.	61	В.	71		C.	32	D.	83			
	C.	73	D.	81								
	Answe	r: Option D			Answer: Option A							
	<b>Explanation:</b> Each of the numbers except 81 is a prime number.				<ul> <li>Explanation: Go on adding 5, 8, 11, 14, 17, 20.</li> <li>So, the number 47 is wrong and must be replaced by 46.</li> <li>4. 1, 8, 27, 64, 124, 216, 343</li> </ul>							
14.	3, 5, 7,	12, 17, 19				А.	8	В.	27			
	<b>A.</b>	19	В.	17		C.	64	D.	124			
	C.	5	D.	12				-				
					Answe	er: Optio	on <b>D</b>					
	<b>Explanation:</b> Each of the numbers is a prime number			<b>Explanation:</b> The numbers are $1^3$ , $2^3$ , $3^3$ , $4^3$ etc. So, 124 is wrong; it must have been $5^3$ <i>i.e.</i> , 125.								
	except	12.				А.	31	-		B.	91	
						C.	56			D.	15	
						Answe	r: Opti	on <b>B</b>				

**Explanation:** 1,  $1 + 1^2 = 2$ ,  $2 + 2^2 = 6$ ,  $6 + 3^2 = 15$ ,  $15 + 4^2 = 31$ ,  $31 + 5^2 = 56$ ,  $56 + 6^2 = 92$ 

Last number of given series must be 92 not 91.

	10. 125, 127, 130, 135, 142, 153, 165					
6. 52, 51, 48, 43, 34, 27, 16	<b>A.</b> 130 <b>B.</b> 142					
<b>A.</b> 27 <b>B.</b> 34	<b>C.</b> 153 <b>D.</b> 165					
<b>C.</b> 43 <b>D.</b> 48	Answer: Option D					
Answer: Option B	<b>Explanation:</b> Prime numbers 2, 3, 5, 7, 11, 13					
<b>Explanation:</b> Subtract 1, 3, 5, 7, 9, 11 from successive numbers.	So, 165 is wrong.					
So, 34 is wrong.						
	11. 46080, 3840, 384, 48, 24, 2, 1					
7. 4, 6, 8, 9, 10, 11, 12	<b>A.</b> 1 <b>B.</b> 2					
<b>A.</b> 10 <b>B.</b> 11	<b>C.</b> 24 <b>D.</b> 384					
<b>C.</b> 12 <b>D.</b> 9	Answer: Option C					
Answer: Option B	Explanation: The terms are successively divided by 12, 10, 8, 6,etc.So, 24 is wrong, it should be 8 (48/6 = 8).					
<b>Explanation:</b> Each number is a composite number except 11.						
8 105 85 60 30 0 45 90	12. 6, 13, 18, 25, 30, 37, 40					
<b>A.</b> 0 <b>B.</b> 85	<b>A.</b> 25 <b>B.</b> 30					
<b>C.</b> -45 <b>D.</b> 60	<b>C.</b> 37 <b>D.</b> 40					
Answer: Option A	Answer: Option <b>D</b> Explanation: The differences between two successive terms from the beginning are 7, 5, 7, 5, 7, 5.					
<b>Explanation:</b> Subtract 20, 25, 30, 35, 40, 45 from successive numbers.						
So, 0 is wrong.	So, 40 is wrong.					
	13. 36, 54, 18, 27, 9, 18.5, 4.5					
9. 5, 16, 6, 16, 7, 16, 9	<b>A.</b> 4.5 <b>B.</b> 18.5					
<b>A.</b> 9 <b>B.</b> 7	<b>C.</b> 54 <b>D.</b> 18					
C. 6 D. None of these	Answer: Option B					
Answer: Option A	<ul> <li>Explanation: The terms are alternatively multiplied by 1.5 and divided by 3. However, 18.5 does not satisfy it.</li> <li>14. 56, 72, 90, 110, 132, 150</li> </ul>					
<b>Explanation:</b> Terms at odd places are 5, 6, 7, 8 etc. and each term at even place is 16.						
So. 9 is wrong.	<b>A.</b> 72 <b>B.</b> 110					
22, 2 0 mong.	<b>C.</b> 132 <b>D.</b> 150					

3. 196, 169, 144, 121, 100, 80, 64 Answer: Option D 169 **B**. 144 Α. Explanation: The numbers are 7 x 8, 8 x 9, 9 x 10, 10 x 11, 11 x 12, 12 x 13. C. 100 121 D. So, 150 is wrong. 80 E. 15. 25, 36, 49, 81, 121, 169, 225 Answer: Option E 36 49 Α. В. **Explanation:** Numbers must be  $(14)^2$ ,  $(13)^2$ ,  $(12)^2$ ,  $(11)^2$ ,  $(10)^2$ ,  $(9)^2$ ,  $(8)^2$ . C. 121 D. 169 So, 80 is wrong. Answer: Option A 4. 445, 221, 109, 46, 25, 11, 4 Explanation: The numbers are squares of odd natural Α. 221 **B**. 109 numbers, starting from 5 up to 15. C. 46 D. 25 So, 36 is wrong. E. 11 1. 7, 8, 18, 57, 228, 1165, 6996 Α. 8 **B**. 18 Answer: Option C 57 D. 228 **C**. **Explanation:** Go on subtracting 3 and dividing the result by 2 to obtain the next number. Е. 1165 Clearly, 46 is wrong. Answer: Option D 5. 190, 166, 145, 128, 112, 100, 91 Α. 100 166 Explanation: Let the given numbers be A, B, C, D, E, F, R. G. С. 128 145 D. Then, A, A x 1 + 1, B x 2 + 2, C x 3 + 3, D x 4 + 4, E x 5 +5, F x 6 + 6 are the required numbers. E. 112 Clearly, 228 is wrong. Answer: Option D 2. 1, 1, 2, 6, 24, 96, 720 Explanation: Go on subtracting 24, 21, 18, 15, 12, 9 720 96 Α. В. from the numbers to get the next number. C. 24 D. 6 190 - 24 = 166166 - 21 = 145145 - 18 = 127 [Here, 128 is placed instead of 127] E. 2 127 - 15 = 112 $112 - 12 = 100 \dots$  and so on. Answer: Option B Therefore, 128 is wrong. Explanation: Go on multiplying with 1, 2, 3, 4, 5, 6 to get next number. So, 96 is wrong.

6.	19, 26, 33, 46, 59, 74, 91	9. 40960, 10240, 2560, 640, 200, 40, 10				
	<b>A.</b> 26 <b>B.</b> 33	<b>A.</b> 640 <b>B.</b> 40				
	<b>C.</b> 46 <b>D.</b> 59	<b>C.</b> 200 <b>D.</b> 2560				
	<b>E.</b> 74	<b>E.</b> 10240				
	Answer: Option B	Answer: Option C				
	<b>Explanation:</b> Go on adding 7, 9, 11, 13, 15, 17 respectively to obtain the next number.	<b>Explanation:</b> Go on dividing by 4 to get the next number.				
	So, 33 is wrong. It must be 35	So, 200 is wrong.				
7.	1, 3, 10, 21, 64, 129, 356, 777	10. 3, 7, 15, 39, 63, 127, 255, 511				
	<b>A.</b> 10 <b>B.</b> 21	<b>A.</b> 7 <b>B.</b> 15				
	<b>C.</b> 64 <b>D.</b> 129	<b>C.</b> 39 <b>D.</b> 63				
	<b>E.</b> 356	<b>E.</b> 127				
	Answer: Option E	Answer: Option C				
	<b>Explanation:</b> A x 2 + 1, B x 3 + 1, C x 2 + 1, D x 3 + 1 and so on.	<b>Explanation:</b> Go on multiplying 2 and adding 1 to get the next number.				
	So, 356 is wrong.	So, 39 is wrong.				
8.	6, 12, 48, 100, 384, 768, 3072	11. 64, 71, 80, 91, 104, 119, 135, 155				
	<b>A.</b> 768 <b>B.</b> 384	<b>A.</b> 71 <b>B.</b> 80				
	<b>C.</b> 100 <b>D.</b> 48	<b>C.</b> 104 <b>D.</b> 119				
	<b>E.</b> 12	<b>E.</b> 135				
	Answer: Option C	Answer: Option E				
	<b>Explanation:</b> Each even term of the series is obtained by multiplying the previous term by 2.	<b>Explanation:</b> Go on adding 7, 9, 11, 13, 15, 17, 19 respectively to obtain the next number.				
	$2^{nd}$ term = (1 <sup>st</sup> term) x 2 = 6 x 2 = 12	So, 135 is wrong.				
	$4^{\text{th}}$ term = ( $3^{\text{rd}}$ term) x 2 = 48 x 2 = 96.					
	$6^{\text{th}}$ term = (5 <sup>th</sup> term) x 2 = 384 x 2 = 768.	12. 15, 16, 34, 105, 424, 2124, 12576				
	••• $4^{th}$ term should be 96 instead of 100.	<b>A.</b> 16 <b>B.</b> 34				
		<b>C.</b> 105 <b>D.</b> 424				
		<b>E.</b> 2124				

15. 3, 7, 15, 27, 63, 127, 255 **Answer:** Option **E Explanation:** $2^{nd}$  term = (1<sup>st</sup> term) x 1 + 1 = 15 x 1 + 1 =  $3^{rd}$  term =  $(2^{nd}$  term) x 2 + 2 = 16 x 2 + 2 = 34.  $4^{\text{th}}$  term = ( $3^{\text{th}}$  term) x 3 + 3 = 34 x 3 + 3 = 105.  $5^{\text{th}}$  term = (4<sup>th</sup> term) x 4 + 4 = 105 x 4 + 4 = 424  $6^{\text{th}}$  term = (5<sup>th</sup> term) x 5 + 5 = 424 x 5 + 5 = 2125  $\cdot \cdot \cdot 6^{\text{th}}$  term should 2125 instead of 2124. 13. 10, 26, 74, 218, 654, 1946, 5834 26 74 Α. **B**. C. D. 218 654 E. 1946 Answer: Option D **Explanation:**  $2^{nd}$  term =  $(1^{st}$  term) x 3 - 4 = 10 x 3 - 4 =  $3^{rd}$  term =  $(2^{rd}$  term) x 3 - 4 = 26 x 3 - 4 = 74.  $4^{\text{th}}$  term = ( $3^{\text{th}}$  term) x 3 - 4 = 74 x 3 - 4 = 218.  $5^{\text{th}}$  term = (4<sup>th</sup> term) x 3 - 4 = 218 x 3 - 4 = 650.  $\therefore$  5<sup>th</sup> term must be 650 instead of 654.

14. 2880, 480, 92, 24, 8, 4, 4

16.

26.

А.	480	В.	92
C.	24	D.	8
E.	4		

## Answer: Option B

Explanation: Go on dividing by 6, 5, 4, 3, 2, 1 respectively to obtain the next number.

Clearly, 92 is wrong.

7 15 Α. **B**. C. 27 D. 63 127 E.

## Answer: Option C

Explanation: Go on multiplying the number by 2 and adding 1 to it to get the next number.

So, 27 is wrong.