

23/6/25 Monday

### Math Homework - Number Series

Q. Find the missing terms.

a.  $121, 11, 81, 9, \underline{\quad}, 7$

b.  $100, 50, 25, \underline{\quad}, 6.25$

c.  $4, 9, 64, 125, 1296, \underline{\quad}$

d.  $2, 5, 12, 24, 48, \underline{\quad}$

e.  $44, 22, 66, 33, 132, \underline{\quad}$

a.  $121, 11, 81, 9, \underline{\quad}, 7$

$$11^2, 9^2, 7^2$$

explain the logic in detail in the form of statements.....

$121, 11, 81, 9, \underline{49}, 7$

b.  $100, 50, 25, \underline{\quad}, 6.25$

$$\cancel{100} \cancel{50} \cancel{25} \cancel{1} \times 2 \quad 2 \quad 2 \quad 2$$

$100, 50, 25, \underline{12.50}, 6.25$

Galaxy

c.  $4, 9, 64, 125, 1296, \underline{\quad}$   
 $2^2, 3^2, 4^3, 5^3, 6^4, 7^4$

$49, 64, 125, 1296, \underline{2401}$

d.  $2, 5, 12, 24, 48, \underline{\quad}$   
 $\uparrow \times 2 \quad \uparrow \times 2 \quad \uparrow \times 2$

$2, 5, 12, 24, 48, \underline{96}$

e.  $44, 22, 66, 33, 132, \underline{\quad}$   
 $\uparrow \times 2 \quad \uparrow \times 2 \quad \uparrow \times 2$

$44, 22, 66, 33, 132, \underline{66}$

2	6	18
4	20	100
?	21	147

Solve the puzzle.

First Row = 2, 6, 18, all multiplied by 3  
 $2 \times 3 = 6$   
 $6 \times 3 = 18$

Second Row = 4, 20, 100, all multiplied by 5

$$4 \times 5 = 20$$

~~$$20 \times 5 = 100$$~~

Third Row = ?, 21, 147

$147 / 21 = 7$ , so by that logic

$$x \times 7 = 21$$

$$x = 3$$

So ? = 3 and if we multiply that by 7, we get 21

2			
5	3		
6	1	?	
8	2	3	7

Adding values vertically reveals a pattern e.g. on the left side,  $5+1=6$ ,  $5+1+2=8$ , reveals values on the left side of the pyramid.

Applying the same logic to the right side,  
 $3+1=4$ ,  $3+1+3=7$ .

So the ? is 4.

$2+7=27$
$4+4=24$
$5+9=42$
$6+0=?$

$2+7=9$	$9 \times 3 = 27$
$4+4=8$	$8 \times 3 = 24$
$5+9=14$	$14 \times 3 = 42$
$6+0=6$	$6 \times 3 = 18$

$? = 18$

Q. Find the missing term in given.

a) AZ, GT, MN,    YB

(1)(26), (7)(20), (13)(14)    (25)(2)

$A+6=7(G)$

$G+6=13(M)$

$M+6=19(S)$

$Z-6=20(T)$

$T-6=14(N)$

$N-6=8(H)$

AZ, GT, MN, SH, YB.

6) PMT, OOS, NQR, MSQ, —

$(16)(13)(20), (15)(15)(19), (14)(17)(18), (13)(19)(17)$

$P=16, O=15, N=14, M=13, L=12$

$M=13, O=15, Q=17, S=19, U=21$

$T=20, S=19, R=18, G=17, P=16$

LUP = (12)(21)(16)

PMT, OOS, NQR, MSQ, LUP

c) The word SUPERMAN is written as a code TTQDSLBN, then the code of SPIDERMAN is?

S U P E R M A N  
19 21 16 5 18 13 1 14

T T Q D S L B M  
20 20 17 9 19 12 2 13  
+1 -1 +1 -1 +1 -1 +1 -1

S P I D E R M A N  
19 16 4 5 18 13 1 14  
20 15 10 3 6 17 14 0 13

TOJCFQNZM

Galaxy

By / Date

d) PAKISTAN : SCLIRR X J  
PESHAWAR : ??

P A K I S T A N  
16 1 11 9 19 20 1 14

S C L I R R X J  
19 3 12 9 18 18 24 10  
+3 +2 +1 0 -1 -2 -3 -4

P E S H A W A R  
16 5 19 8 1 23 1 18

S G T H Z U X N  
19 7 20 8 0 21 24 14

PESHAWAR : SGTHZUXN

e) CERTAIN : BFGUZJM  
MUNDANE : ??

C E R T A I N  
3 5 18 20 1 9 14

B F Q U Z J M  
2 6 17 21 26 10 13

-1 +1 -1 +1 -1 +1 -1

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M U N D A N E  
 13 21 14 4 1 14 5

L V M E Z O D  
 12 22 13 5 0 15 4

MUNDANE: LVMEZOD

Q. If in a certain language BROTHER is written as QDGNSNQA, then SISTER would be written as?

B R O T H E R  
 2 18 15 20 8 5 18

Q D G S N Q A  
 17 4 7 19 14 17 1

+15 -14 -8 -1 +6 +12 -17  
 S I S T E R  
 19 9 19 20 5 18

explain these steps in the form of verbal statements. for all answers

$$15 + 19 = 8 (H)$$

$$-14 + 9 = -5, 26 - 5 = 21 (U)$$

$$-8 + 19 = 11 (K)$$

$$-1 + 20 = 19 (S)$$

$$6 + 5 = 11 (K)$$

$$12 + 18 = 30, 30 - 26 = 4 (D)$$

SISTER: HUKSKD

Galaxy

Q. COMPUTER: RFUVQNP  
MEDICINE : ??

C	O	M	P	U	T	E	R
3	15	13	16	21	20	5	18

R	F	U	V	Q	N	P	C
18	6	21	22	17	14	16	3

+15 -9 +8 +6 -4 -6 +11 -15

M	E	D	I	C	I	N	E
13	5	4	9	3	9	14	5

$$15 + 13 = 28, 28 - 26 = 2 \text{ (B)}$$

$$-9 + 5 = -4, 26 - 4 = 22 \text{ (V)}$$

$$8 + 4 = 12 \text{ (L)}$$

$$6 + 9 = 15 \text{ (O)}$$

$$-4 + 3 = -1, 26 - 1 = 25 \text{ (I)}$$

$$-6 + 9 = 3 \text{ (C)}$$

$$11 + 14 = 25 \text{ (Y)}$$

$$-15 + 5 = -10, 26 - 10 = 16 \text{ (P)}$$

• MEDICINE = BVLOYCYP

Q. Look at this series :  $F_2, \underline{\quad}, D_8, C_{16}, B_{32}$ . what number should fill the blank?

$$B \rightarrow C \rightarrow D \rightarrow \underline{E} \rightarrow F$$

$$2 \times 2, 4 \times 2, 8 \times 2, 16 \times 2$$

$$F_2, E_4, D_8, C_{16}, B_{32}$$

Q. LA DLINE : PYRBQC-RC  
HOMEMADE:

L	A	N	D	L	I	N	E
12	1	14	4	3	9	14	5

P	Y	R	B	Q	G	R	C
16	25	18	2	17	7	18	3

$$+4 +24 +4 -2 +4 -2 +4 -2$$

$$4 + 8 = 12 (L)$$

$$24 + 15 = 39, 39 - 26 = 13 (M)$$

$$4 + 13 = 17 (Q)$$

$$-2 + 5 = 3 (C)$$

$$4 + 13 = 17 (Q)$$

$$-2 + 1 = -1, 26 - 1 = 25 (Y)$$

$$4 + 4 = 8 (H)$$

$$-2 + 5 = 3 (C)$$

• HOMEMADE : LMQCQCQYHC