Pre - algebra

a)

r	s	t	u	v
4	8	6	5	7

Using this table, find out

1. $r + v = 4 + 7 = 11$
2. $t + s = 6 + 8 = 14$
3. $t - r = 6 - 4 = 2$
4. $u - r = 5 - 4 = 1$
5. $s \times u = 8 \times 5 = 40$

b) The sum of two numbers is 7, if one of the number is 4, what is the other number?

Answer:- $4 + ? = 7$

Let the other number be x.

$4 + x = 7$

$x = 7 - 4$

$= 3$

Let us verify. $4 + 3 = 7$.

$\therefore$ $x = 3$. The other number is 3.

c) The product of a number and 7 is 42.
Find the other number.

Answer :- let the other number be y.

$7 \times y = 42$

$y = \frac{42}{7} = 6$

a) A number when multiplied by 9 is 81. What is the number?

b) A number increased by 10 is 23. What is the number?

c) 10 more than 3 times a number is 19. What is the number

a) A number when multiplied by 9 is 81. What is the number?

solution :- let the number be x.

$x \times 9 = 81$

$\therefore x = \frac{81}{9} = 9$

Verify :- $9 \times 9 = 81$

So the other number is 9.

b) A number increased by 10 is 23. What is the number?

solution :- let the number L.

$L + 10 = 23$

So $L = 23 - 10 = 13$

Verify : $13 + 10 = 23$

So the other number is 13.

c) 10 more than 3 times a number is 19. What is the number

solution :- let the number x.

then $3x + 10 = 19$

So $3x = 19 - 10 = 9$

So $x = \frac{9}{3} = 3$

Verify :- $3 \times 3 + 10 = 19$

So the number is 3.

3. Substitute the letters with the values shown in the table and solve the problems in the grid.

r	s	t	u	v	w	y	z
4	8	6	5	7	3	9	2

1 $w+v$ R $=3+7=10$	2 $t-4$ C $=6-4=2$	3 $t+y$ U $=6+9=15$	4 $s-r$ E $=8-4=4$	5 $y+z$ D $=9+2=11$
6 $r+s+9$ H $=4+8+9=12+9=21$	7 $s+z-w$ F $=8+2-3=10-3=7$	8 $w+y-t$ S $=3+9-6=12-6=6$	9 $8+r+u$ O $=8+4+5=8+9=17$	10 $(u\times v)+4$ L $=(5\times 7)+4=35+4=39$
11 $=24+8=32$ $4\times t+s$ $=4\times 6+8$	12 $=32-(4\times 2)=32-8$ $32-(r\times z)$ $=24$	13 $=9\times 9-4=81-4$ $(9\times y)-r$ $=77$	14 $=6+(3\times 90)$ $t+(w\times 90)$ $=6+270=276$	15 $=(7\times 7)+2$ $(7\times v)+z$ $=51$
16 $s+2w$ Add s and double the w $=8+2\times 3=8+6=14$	17 $(y-3)z$ y decreased by 3 and multiply z $=(9-3)\times 2=12$	18 The sum of t and v and y. $t+v+y=22$	19 $(w+5)\,w$ w increased by 5 and multiplied by w $8\times 3=24$	20 [illegible]
21 [illegible]	22 $12+(v+y)=28$ 12 more than the sum of v and y	23 [illegible]	24 $v+t-z$ v added to t and decreased by z $=11$	25 $(6+y)+v$ 6 increased by y and added to v $=15+v=15+7=22$

There are letters of the alphabet in each grid from 1 to 10. Write the appropriate letters in the table that follows against the answers and solve the riddle.