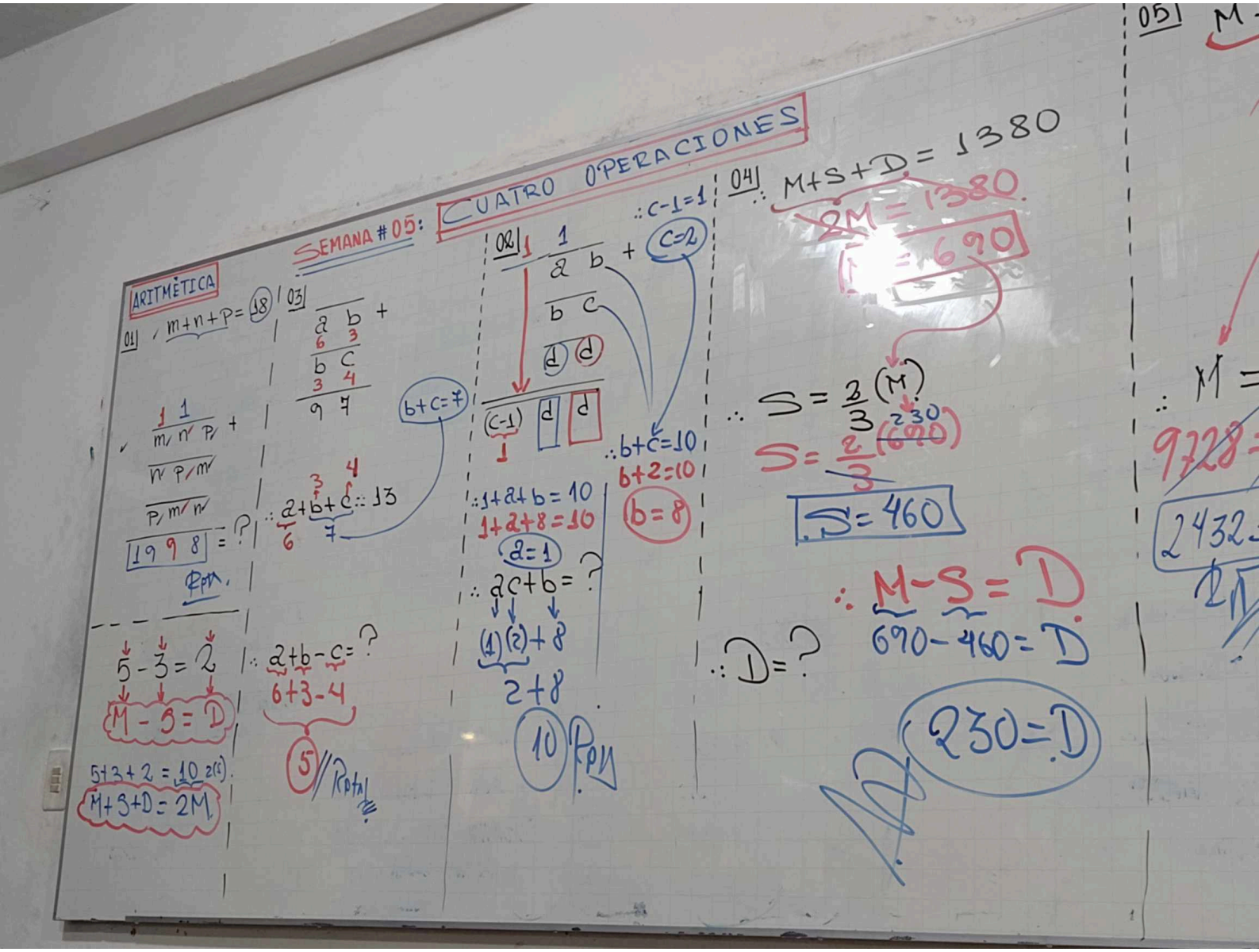


ARITMÉTICA

SEMANA # 05: CUATRO OPERACIONES

01) $m+n+p=18$

$$\begin{array}{r} 1\ 1 \\ m\ n\ p \\ \hline n\ p\ m \\ \hline p\ m\ n \\ \hline \boxed{1\ 9\ 9\ 8} \end{array} = ?$$

Rpta.

$5-3=2$

$M-S=D$

$5+3+2=10$ 2(5)

$M+S+D=2M$

03)

$$\begin{array}{r} a\ b \\ 6\ 3 \\ \hline b\ c \\ 3\ 4 \\ \hline 9\ 7 \end{array} +$$

$b+c=7$

$\therefore \underbrace{a}_{6}+\underbrace{\overset{3}{b}+\overset{4}{c}}_{7} = 13$

$\therefore a+b-c=?$

$6+3-4$

5 // Rpta

02)

$$\begin{array}{r} 1\ 1 \\ a\ b \\ \hline b\ c \\ d\ d \\ \hline (c-1)\ \boxed{d}\ \boxed{d} \end{array} +$$

$\therefore c-1=1$

$c=2$

$\therefore b+c=10$

$b+2=10$

$b=8$

$\therefore 1+a+b=10$

$1+a+8=10$

$a=1$

$\therefore ac+b=?$

$(1)(2)+8$

$2+8$

10 Rpta

04) $\therefore M+S+D=1380$

$2M=1380$

$M=690$

$\therefore S=\frac{2}{3}(M)$

$S=\frac{2}{3}(\overset{230}{690})$

$\boxed{S=460}$

$\therefore M-S=D$

$690-460=D$

$\therefore D=?$

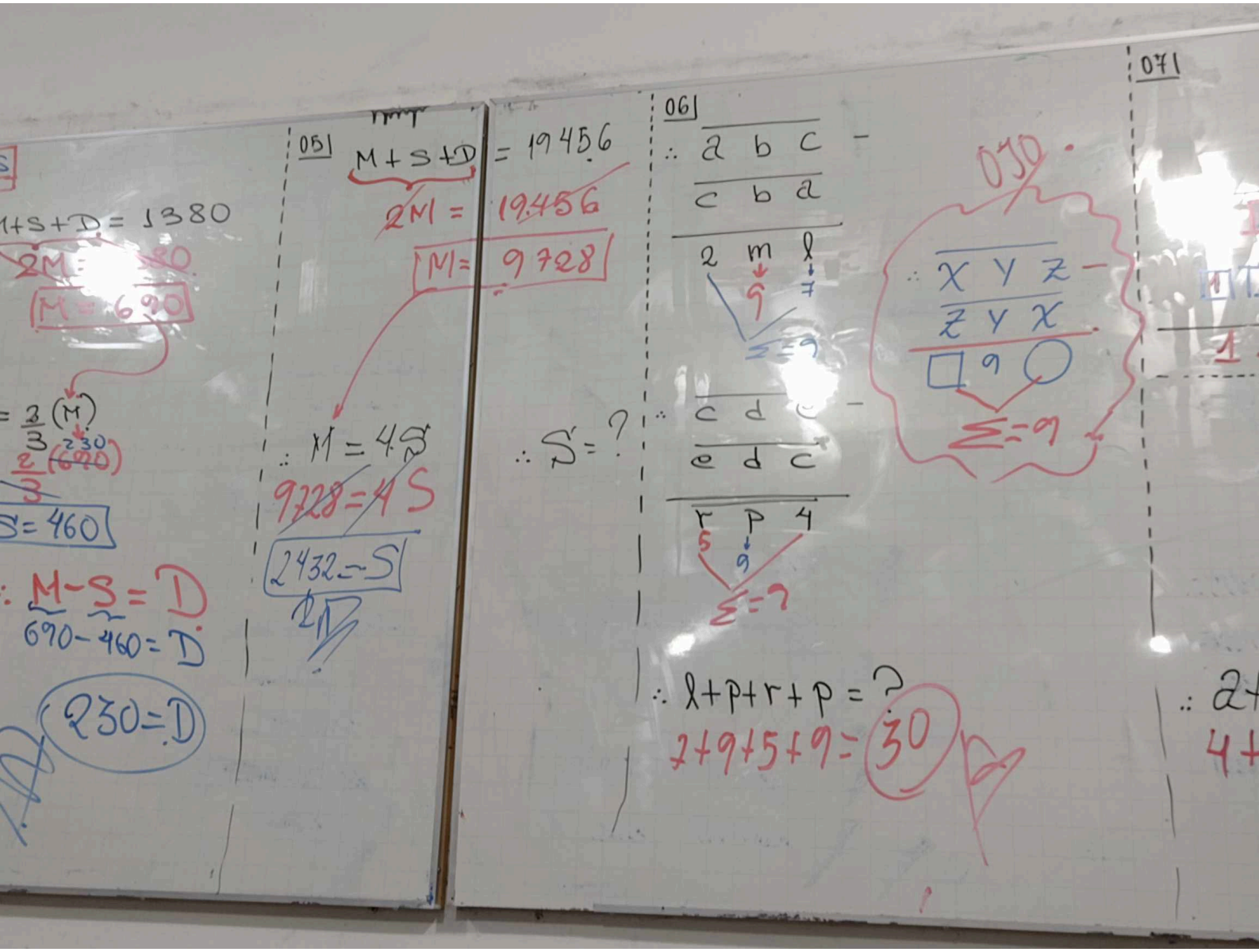
$230=D$

05) M =

$\therefore M =$

$9728 =$

$\boxed{2432}$



S

M+S+D = 1380

2M = 1380

M = 690

= 2/3 (M)

2/3 (690) 230

S = 460

∴ M − S = D

690 − 460 = D

230 = D

05

M + S + D = 19456

2M = 19456

M = 9728

∴ M = 4S

9728 = 4S

2432 = S

∴ S = ?

06

∴ a b c −

c b a

2 m l

9 7

Σ = 9

∴ c d e −

e d c

r p 4

5 9

Σ = 9

∴ l + p + r + p = ?

7 + 9 + 5 + 9 = 30

OJO

∴ x y z −

z y x

□ 9 ○

Σ = 9

07

∴ a+

4+

070

$$\begin{array}{r} XYZ \\ -\ ZYX \\ \hline \square\,9\,\bigcirc \end{array}$$

$\therefore Z = 9$

071

$$\begin{array}{r} 1\ 2 \\ a_4\,b_3\,c_8 \times 3\cdot 3 \\ \hline 1\ 3\ 1\ 4 \\ +\ 1\ 3\ 1\ 4 \\ \hline 1\ 4\ 4\ 5\ 4 \end{array}$$

$\therefore a+b+c = ?$

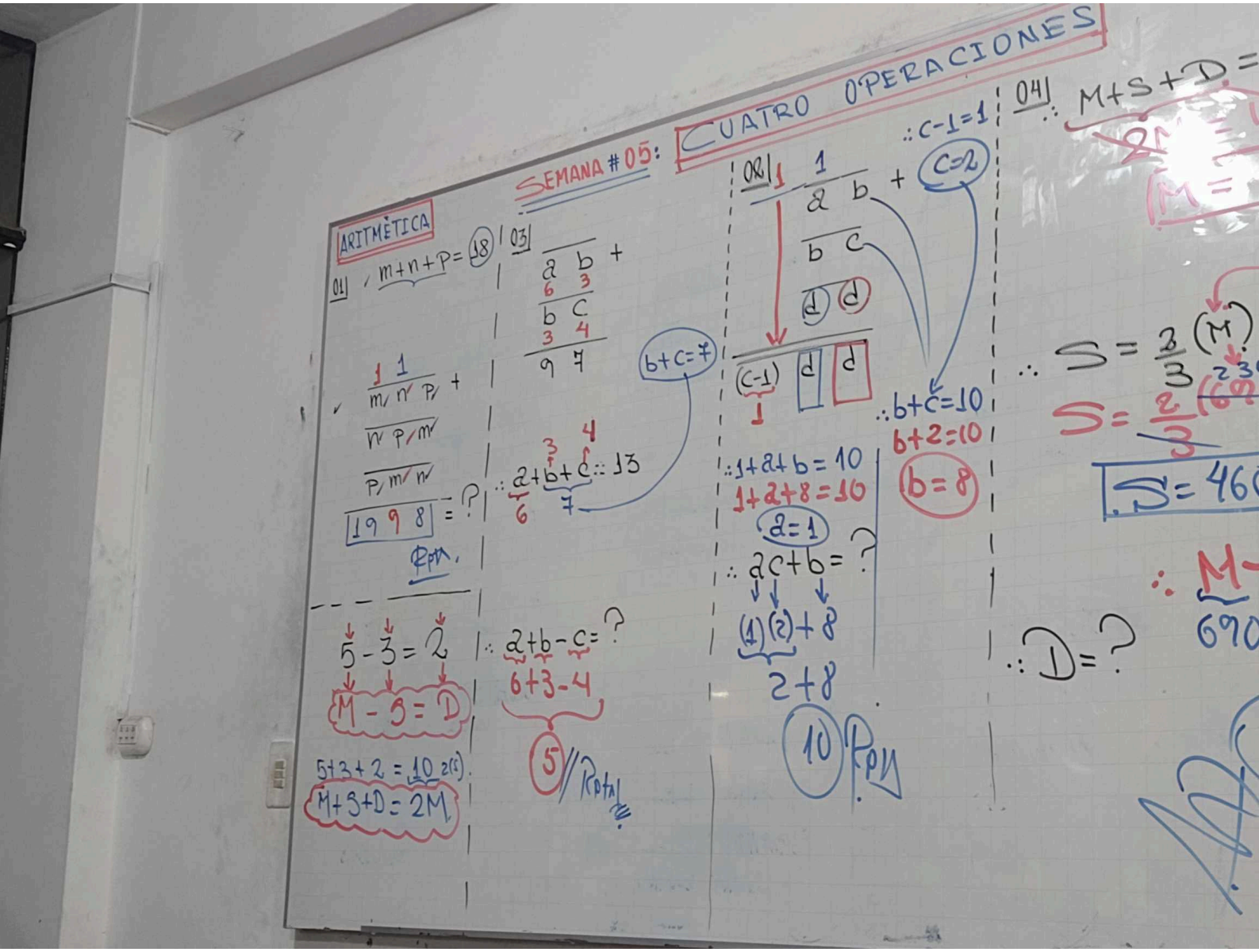
$4+3+8 = 15$

081

$$\begin{array}{r} 3\ 2\ 4 \\ a_1\,b_4\,c_3\,d_5 \times 2\ 8 \\ \hline 1\ 1\ 1\ 4\ 8\ 0 \\ +\ \square\ 2\ 8\ 7\ 0 \\ \hline 4\ 0\ 1\ 8\ 0 \end{array}$$

$\therefore a \times b \times c \times d = ?$

$1 \times 4 \times 3 \times 5 = 60$


ARITMÉTICA
SEMANA #05: CUATRO OPERACIONES
01
m+n+p = 18
1 1
m n p +
n p m
p m n
1 9 9 8 = ?
Rpta.
5 - 3 = 2
M - S = D
5+3+2 = 10 2(5)
M+S+D = 2M
03
a b +
6 3
b c
3 4
9 7
b+c=7
∴ a+b+c = 13
6 7
∴ a+b-c = ?
6+3-4
5 // Rpta
02
1 1
a b +
b c
d d
(c-1) d d
1
∴ c-1=1
c=2
∴ b+c=10
b+2=10
b=8
∴ 1+a+b = 10
1+a+8 = 10
a=1
∴ ac+b = ?
(1)(2)+8
2+8
10 Rpta
04
∴ M+S+D =
∴ S = 2/3 (M)
S = 2/3 (69
S = 460
∴ M-
690
∴ D = ?

RACIONES

C-1=1

C=2

=10

2=10

=8

04) ∴ M+S+D = 1380

2M = 1380

M = 690

∴ S = 2/3 (M)

S = 2/3 (690)

S = 460

∴ M - S = D

690 - 460 = D

∴ D = ?

230 = D

05) M+S+D

2M =

M =

∴ M = 4S

9728 = 4S

2432 = S

09

$$\begin{array}{ccccc} & a & b & c & \times\ 2\ 3 \\ & 4 & 3 & 5 & \\ \hline \boxed{1} & {}^{1}\boxed{3} & \boxed{0} & \boxed{5} & + \\ \boxed{8} & \boxed{7} & \boxed{0} & & \\ \hline 1 & 0 & 0 & 0 & 5 \end{array}$$

$\therefore a+b+c=?$

$4+3+5$

12

DIVIDENDO — DIVISOR

$$\begin{array}{c|c} D & d \\ \hline r & q \end{array}$$

COCIENTE

RESIDUO

$\boxed{D=(d)(q)+r}$

$r_{máx.}=d-1.$

$r_{mín.}=1$

10

$$\begin{array}{c|c} 1081 & 2x \\ \hline (x) & x \end{array}$$

$\therefore 1081=(2x)(x)+x$

$1081=2x^2+x$

$0=2x^2+1x-1081$

$2x \rightarrow +47=+47x+$

$x \rightarrow -23=-46x$

$+x$

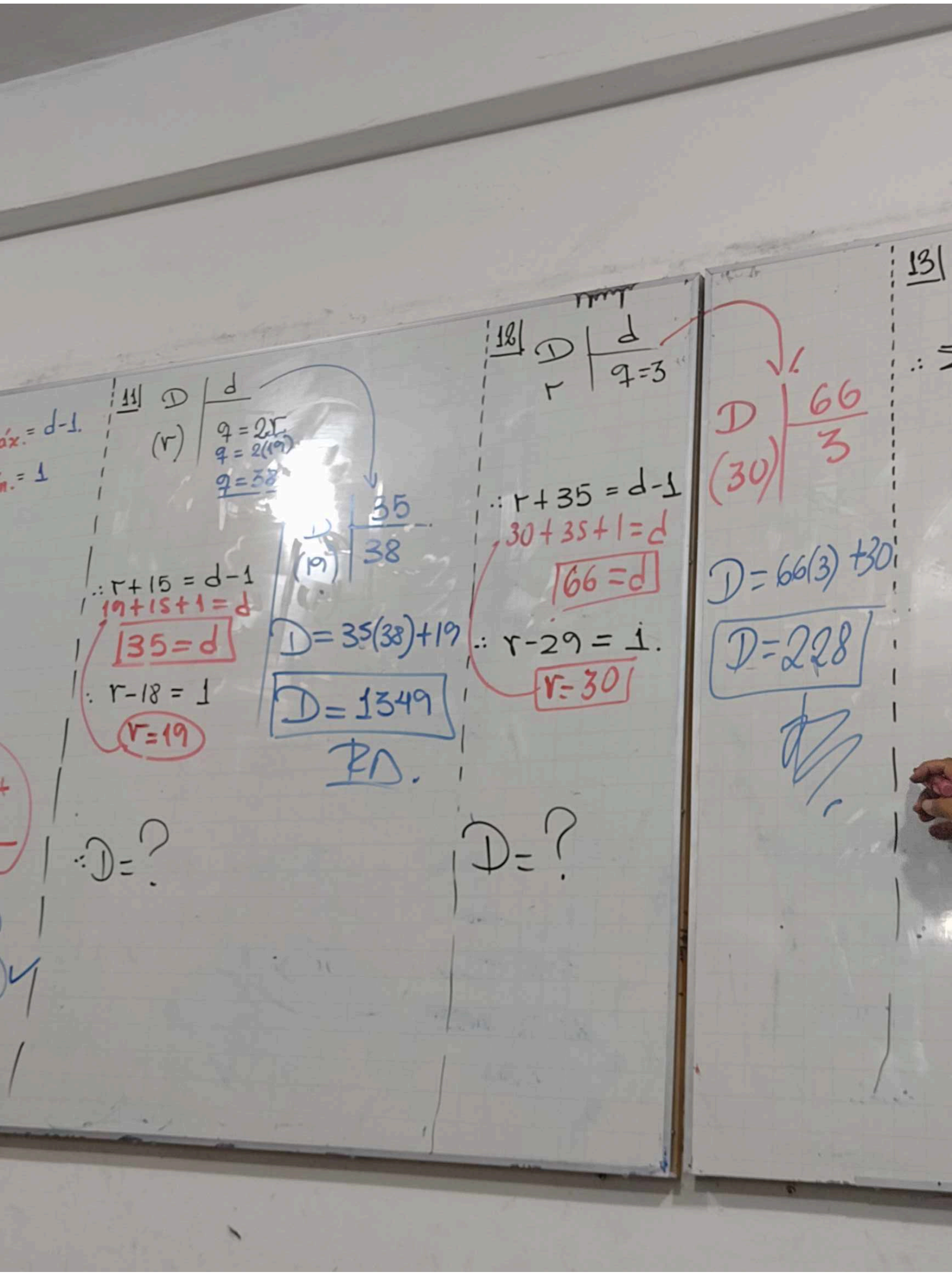
$\therefore 2x+47=0$ | $x-23=0$

$\cancel{x=-\frac{47}{2}}$ | $x=23$ ✓

$\therefore 2x=?$

$2(23)=46$ Pts

11


11| D | d
(r) | q = 2r
q = 2(19)
q = 38
D | 35
(19) | 38
D = 35(38) + 19
D = 1349
RD.
∴ r + 15 = d - 1
19 + 15 + 1 = d
35 = d
∴ r - 18 = 1
r = 19
∴ D = ?
18| D | d
r | q = 3
∴ r + 35 = d - 1
30 + 35 + 1 = d
66 = d
∴ r - 29 = 1.
r = 30
D = ?
D | 66
(30) | 3
D = 66(3) + 30
D = 228
13|

máx. = d-1.

mín. = 1

11| D | d
(r) | q = 2r
q = 2(19)
q = 38

∴ r+15 = d-1
19+15+1 = d
35 = d

∴ r-18 = 1
r = 19

D | 35
(19) | 38

D = 35(38)+19
D = 1349
RD.

∴ D = ?

12| D | d
r | q = 3

∴ r+35 = d-1
30+35+1 = d
66 = d

∴ r-29 = 1.
r = 30

D = ?

D | 66
(30) | 3

D = 66(3)+30
D = 228

13|

13| $a+b+c+d=19$

$\therefore \Sigma$ CIFRAS DEL C. A. $(\overline{abcd})$ = ?

MÉTODO "VIX":

C.A. $(9-a)(9-b)(9-c)(10-d)$

$9-a+9-b+9-c+10-d$

$37-(a+b+c+d)$

$37-19=18$ RA

∴ C.A.: COMPLEMENTO ARITMÉTICO

CANTIDAD	C.A.
a	$10-a$
$\overline{ab}$	$100-\overline{ab}$
$\overline{abc}$	$1000-\overline{abc}$

14|

C.A$(\overline{abc})$ + C.A$(\overline{cba})$ = 1031

$1000-\overline{abc}+1000-\overline{cba}=1031$

$969=\overline{abc}+\overline{cba}$

$$\begin{array}{r} \overline{abc} \\ 4\ 3\ 5 \\ \hline \overline{cba} \\ 5\ 3\ 4 \\ \hline 969 \end{array} +$$

$\therefore a+b+c=?$

$4+3+5=12$ RA

15]

$\therefore C.A.(\overline{abc}) = \overline{(b-1)(2b)(a+1)}$

$\Downarrow$

$(9-a)(9-b)(10-c) = \overline{(b-1)(2b)(a+1)}$

$\therefore 9-b=2b$

$9=3b$

$3=b$

$\therefore 9-a=\underbrace{b-1}_{3}$

$9-a=2$

$7=a$

$\therefore 10-c=a+1$

$\underbrace{\quad}_{7}$

$10-c=8$

$2=c$

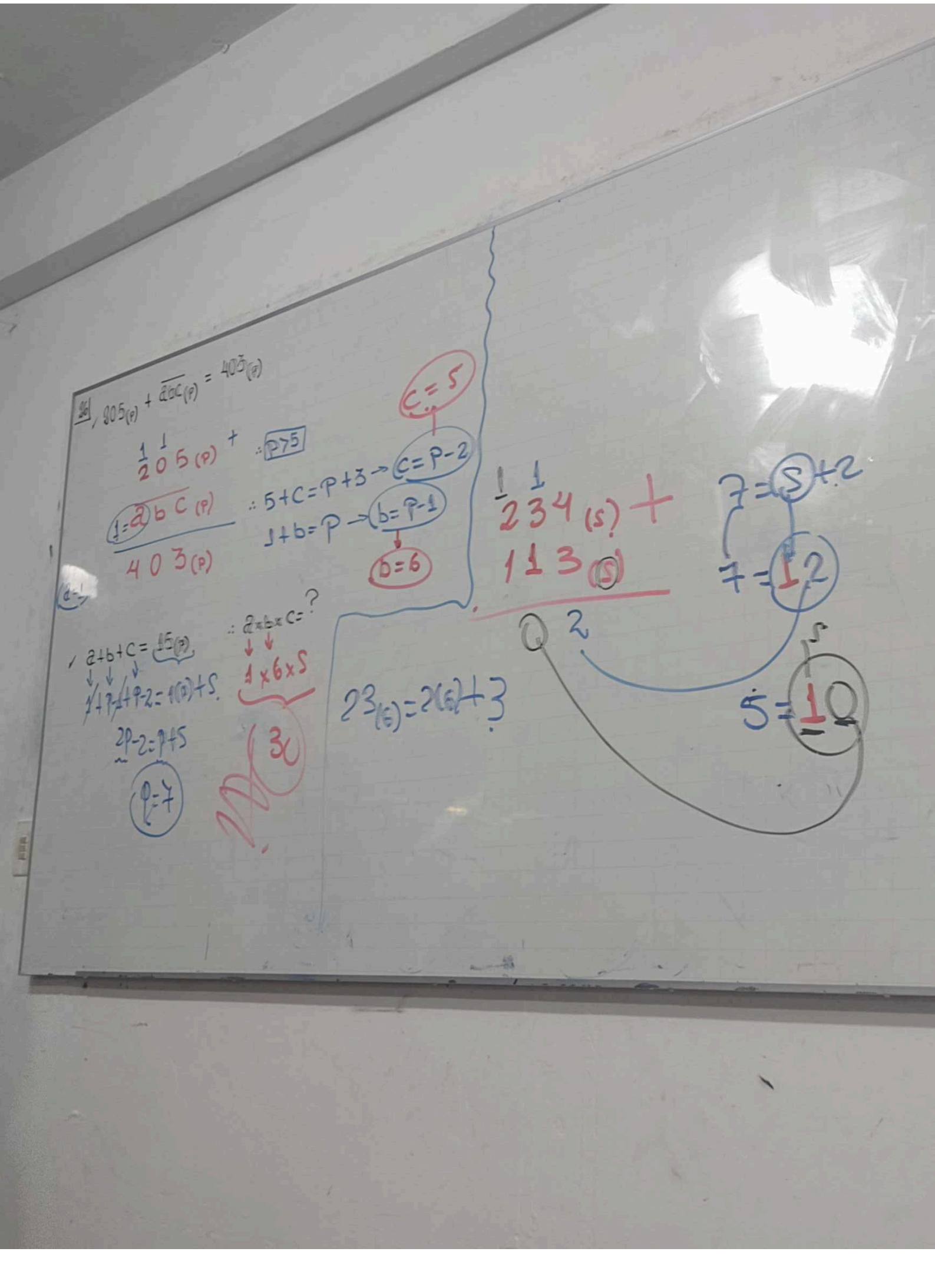
$2x$

x

$3x$

$\therefore a+b+c=?$

$3+7+2=12$



16) $805_{(p)} + \overline{abc}_{(p)} = 403_{(p)}$

$\therefore \boxed{p>5}$

$$\begin{array}{r} \overset{1}{2}\,\overset{1}{0}\,5_{(p)} \\ 1 = a\,b\,c_{(p)} \\ \hline 4\,0\,3_{(p)} \end{array}$$

$\therefore 5+c=p+3 \rightarrow c=p-2$

$c=5$

$1+b=p \rightarrow b=p-1$

$b=6$

$a=1$

$a+b+c=15_{(p)}$

$\cancel{1}+p-\cancel{1}+p-2=1(p)+5$

$2p-2=p+5$

$p=7$

$\therefore a \times b \times c = ?$

$1 \times 6 \times 5$

30

$23_{(6)} = 2(6)+3$

$$\begin{array}{r} \overset{1}{2}\,\overset{1}{3}\,4_{(s)} \\ 1\,1\,3_{(s)} \\ \hline 0\,2 \end{array}$$

$7 = s+2$

$7 = 12$

$5 = 10$