

Value putting

अगर किसी सवाल में Equations कम और Variable ज्यादा हो वहाँ value Putting apply करते हैं। लेकिन Value Putting का use करते समय $\frac{0}{0}, \frac{1}{0}$, Undefined not Possible Form नहीं बननी चाहिए।

Example

If, $a + b = 7$

$7+0$
 $0+7$

तो, $3a + 3b = 21$ ✓

$9+0$
 $15+6$
 $24-3$

answer
 $a \& b$

egⁿ $a \& b$

a और b का मान ज्ञात नहीं कर सकते

- | | |
|-----|------|
| (a) | 20 |
| (b) | 21 ✓ |
| (c) | 24 |
| (d) | 27 |

constant $\rightarrow -1, 11, 30.1, \sqrt{5} - \dots$

variables $\rightarrow x, y, a, b, c - \dots$

1 eqⁿ

1 variable
 x

$$3x - 15 = 0$$

$$x = \frac{15}{3} = 5$$

1 eqⁿ
2 variables
 a, b

$$a + b = 10$$

$$1 + 9$$

$$7 + 3$$

$$8 + 2$$

$$-11 + 21$$

$$-4 + 14$$

$$0 + 10$$

$a, b \times$

$$a + b = 10$$

$$a - b = 4$$

$$a = 7, b = 3$$



यदि $x - y = 5 \Rightarrow$
 $7 - 2 \times 1$

~~$(x - y)^3 = 5^3$
 $x^3 - y^3 - 3xy \times 5 = 125$~~

तो $x^3 - y^3 - 3xy = ?$
 $343 - 8 - 210 \times 1$
 $= 125$

for $x = 5$ 7
 $y = 0$ 1

a) 120

b) 125 ✓

c) -125

d) 250



Step

- (i) सबसे पहले किसी एक Variable को 0 करो अगर सवाल easy नहीं हो रहा तो next Variable को 0 करो। ✓
- (ii) अगर Variable की Value 0 नहीं कर पा रहे तो, 1, -1, 2, सुविधानुसार रखेंगे।



Formula verification:

Put $a = 2, b = 3$

$$(a+b)^2 = (2+3)^2 = 25 \quad \text{L.H.S}$$

$$\begin{aligned} 25 &= 4+6+9 \\ &= 4+12+9 \\ &= 4+12+18 \\ &= 2+3+4 \end{aligned}$$

$$(a+b)^2 = ?$$

~~(a)~~ $a^2 + ab + b^2$

☒ (b) $a^2 + 2ab + b^2$

~~(c)~~ $a^2 + 2ab + 2b^2$

~~(d)~~ $a + b + a^2b^2$

1. If $x + y = 41$, then find $(x - 20)^{2021} + (y - 21)^{2021}$?

यदि $x + y = 41$ है, तो $(x - 20)^{2021} + (y - 21)^{2021}$ ज्ञात कीजिये?

[A] 0

[B] 1

[C] 2

[D] 3

यदि $x + y = 41$
 $41 + 0$
 $20 + 21$

$= \cancel{21}^{2021} + (-\cancel{21})^{2021}$
 $= 0$

2. If $a = x + \frac{2}{x}$ and $b = x - \frac{2}{x}$, then find the value of $a^4 + b^4 - 2a^2b^2$.

यदि $a = x + \frac{2}{x}$ और $b = x - \frac{2}{x}$ है, तो $a^4 + b^4 - 2a^2b^2$ का मान ज्ञात कीजिए।

(RRB NTPC GRADUATE LEVEL CBT-1 2026)

[A] 36

[B] 64

[C] 16

[D] 49

let $x=1$

$$\begin{cases} a=3 \\ b=-1 \end{cases}$$

$$81 + 1 - 18 \times 1 = 64$$

3. Simplify $(5z - 7y)^2 + (7z + 5y)^2 - 49z^2$.

$(5z - 7y)^2 + (7z + 5y)^2 - 49z^2$ को सरल कीजिए।

(SSC CGL MAINS 2024) (RRB Technician Grade-3 2025)

[A] $25z^2 + 74y^2$

[B] $35z^2 + 70y^2$

[C] $26z^2 + 82y^2$

[D] $30z^2 + 83y^2$

put $y=0$

समान $25z^2 + 49z^2 - 49z^2$

4. **Simplify $(5z-12y)^2 + (12z+5y)^2 - 144z^2$.**
 $(5z-12y)^2 + (12z+5y)^2 - 144z^2$ को सरल कीजिए।

(RRB ALL EXAMS 2025)

[A] $24z^2 + 171y^2$

[C] $31z^2 + 161y^2$

~~[B] $25z^2 + 169y^2$~~

[D] $32z^2 + 170y^2$

5. Simplify $(5x - 2y)^2 + (2x + 5y)^2 + (5x + 2y)(5x - 2y)$.
 $(5x - 2y)^2 + (2x + 5y)^2 + (5x + 2y)(5x - 2y)$ को सरल कीजिए।
- [A] $-55x^2 + 25y^2$ [B] $-54x^2 - 25y^2$
[C] $54x^2 + 25y^2$ [D] $55x^2 - 25y^2$

put $y=0$

$$25x^2 + 25x^2 = 54x^2$$

6. Simplify $\frac{(x^2-9) \times (9x^2-1)}{\left(x-\frac{1}{3}\right) \times \left(1-\frac{x}{3}\right)} \times \frac{9}{\left(x+\frac{1}{3}\right) \times \left(1+\frac{x}{3}\right)}$.

$\frac{\cancel{(x^2-9)} \times \cancel{(9x^2-1)}}{\cancel{\left(x-\frac{1}{3}\right)} \times \cancel{\left(1-\frac{x}{3}\right)}} \times \frac{9}{\cancel{\left(x+\frac{1}{3}\right)} \times \cancel{\left(1+\frac{x}{3}\right)}}$. को सरलीकृत करें।

(RRB NTPC GRADUATE LEVEL CBT-1 2026)

[A] -729

[B] 81

[C] -81

[D] 729

put $x=0$

$$\frac{81}{-\frac{1}{3} \times \frac{1}{3}} = -729$$

7. If $x+y=2z$, then $\frac{x}{x-z} + \frac{y}{y-z} = ?$

यदि $x+y=2z$ है, तो $\frac{x}{x-z} + \frac{y}{y-z} = ?$

[A] 0

[C] 2

[B] 1

[D] 3

दी गई 1 eqⁿ
में 3 variables x, y, z

put $z=0$

$y=-x$

$= \frac{x}{x-0} + \frac{-x}{-x-0}$
 $= 1 + 1$
 $= 2$

7. If $x+y=2z$, then $\frac{x}{x-z} + \frac{y}{y-z} = ?$

यदि $x+y=2z$ है, तो $\frac{x}{x-z} + \frac{y}{y-z} = ?$

[A] 0 *put $y=0$*

$$= \frac{2z}{z} = 2$$

[B] 1

[C] 2 *✓ $x=2z$*

[D] 3

*दी गई 1 eqⁿ
दोनों x, y, z*

8. If $a + b + c = 0$, then find the value of $\frac{(a^2 + b^2 + c^2)^2}{a^2 b^2 + b^2 c^2 + c^2 a^2}$.

यदि $a + b + c = 0$ है, तो $\frac{(a^2 + b^2 + c^2)^2}{a^2 b^2 + b^2 c^2 + c^2 a^2}$ का मान ज्ञात।

$-1 + 1 + 0$
[RRB Group D-2022]

[A] 1

[C] 2

but

[B] 4

[D] 0

9. If $\alpha + \beta + \gamma = 0$, then find $\frac{3\beta^2 + \alpha^2 + \gamma^2}{2\beta^2 - \alpha\gamma}$?

यदि $\alpha + \beta + \gamma = 0$, तो $\frac{3\beta^2 + \alpha^2 + \gamma^2}{2\beta^2 - \alpha\gamma}$ ज्ञात करें?

SSC CPO 2024

[A] $1/2$

[B] 1

[C] 2

[D] $1/4$

put $\gamma = 0$
 $\beta = -\alpha$

$$= \frac{4\alpha^2}{2\alpha^2} = 2$$

10. If $x + y + z = 0$, then find the value of $\frac{x^2}{x^2 - yz} + \frac{y^2}{y^2 - zx} + \frac{z^2}{z^2 - xy}$.

यदि $x + y + z = 0$ हो तो $\frac{x^2}{x^2 - yz} + \frac{y^2}{y^2 - zx} + \frac{z^2}{z^2 - xy}$ का मान ज्ञात करें।

[A] 2

[B] 1

[C] 3

[D] 0

but $z=0$
 $\Rightarrow y = -x$

1 eqⁿ
 x, y, z

11. If $a+b+c = 0$, then the value of $\frac{2a^2}{(b^2+c^2-a^2)} + \frac{2b^2}{(a^2+c^2-b^2)} + \frac{2c^2}{(a^2+b^2-c^2)}$ is equal to:

यदि $a+b+c=0$ है, तो $\frac{2a^2}{(b^2+c^2-a^2)} + \frac{2b^2}{(a^2+c^2-b^2)} + \frac{2c^2}{(a^2+b^2-c^2)}$ का मान किसके बराबर है?

[A] 3

[B] -3

[C] -4

[D] 0

$$\frac{2}{1+4-1} + \frac{2}{1+4-1} + \frac{8}{1+1-4}$$
$$\frac{1}{2} + \frac{1}{2} - 4 = 1 - 4$$
$$= -3$$

वे variable set

put $a=b=1$

2/2

12. If $(ab + bc + ca) = 0$, then what is the value of $\left(\frac{1}{a^2 - bc} + \frac{1}{b^2 - ca} + \frac{1}{c^2 - ab}\right)$?

यदि $(ab + bc + ca) = 0$ है, तो $\left(\frac{1}{a^2 - bc} + \frac{1}{b^2 - ca} + \frac{1}{c^2 - ab}\right)$ का मान क्या है?

[A] 2

[C] 1

~~[B] 0~~

[D]

$a+b+c$

$$= \frac{1}{6} + \frac{1}{6} + \frac{1}{1-4}$$

$$= \frac{1}{3} - \frac{1}{3} = 0$$

या

put

$$a=2$$

$$b=2$$

$$c=-1$$

special case $\Rightarrow$

$$\text{put } a=b=1 \text{ \& } c=-\frac{1}{2}$$

$$1+c+c=0$$

$$2c=-1$$

$$c=-\frac{1}{2}$$

13. If $pq+qr+rp=0$, then $\left(\frac{p^2}{p^2-qr} + \frac{q^2}{q^2-rp} + \frac{r^2}{r^2-pq}\right) = ?$

यदि $pq+qr+rp=0$ हो, तो $\left(\frac{p^2}{p^2-qr} + \frac{q^2}{q^2-rp} + \frac{r^2}{r^2-pq}\right) = ?$

[A] 3

[B] 1

[C] 2

[D] 0

put
 $p=2$
 $q=2$
 $r=-1$

$$\frac{4}{6} + \frac{4}{6} + \frac{1}{-3}$$
$$= \frac{4}{3} - \frac{1}{3} = 1$$

14. If $a+b+c=2s$, then $\frac{(s-a)^2+(s-b)^2+(s-c)^2+s^2}{a^2+b^2+c^2}=?$

यदि $a+b+c=2s$ है, तो $\frac{(\cancel{s}-a)^2+(\cancel{s}-b)^2+(\cancel{s}-c)^2+\cancel{s}^2}{a^2+b^2+c^2}=?$

[A] $a^2+b^2+c^2$

[B] 0

[C] 1 ✓

[D] 2

put $s=0$

= ①

$a+b+c=0$

15. What is $\frac{1}{x(x-y)(x-z)} + \frac{1}{y(y-z)(y-x)} + \frac{1}{z(z-x)(z-y)}$ equal to?

$\frac{1}{x(x-y)(x-z)} + \frac{1}{y(y-z)(y-x)} + \frac{1}{z(z-x)(z-y)}$ किसके बराबर है?

[A] 0 ~~X~~

[B] 1 ~~X~~

~~[C] 1/xyz~~ $\frac{1}{1 \times 2 \times 3}$

[D] ~~-1/xyz~~ $= -\frac{1}{6}$

put $x=1$
 $y=2$
 $z=3$

$$\begin{aligned} & \frac{1}{1 \times -1 \times -2} + \frac{1}{2 \times -1 \times 1} + \frac{1}{3 \times 2 \times 1} \\ &= \frac{1}{2} - \frac{1}{2} + \frac{1}{6} \\ &= \frac{1}{6} \end{aligned}$$

16. The value of $\frac{a^2 - (b - c)^2}{(a + c)^2 - b^2} + \frac{b^2 - (a - c)^2}{(a + b)^2 - c^2} + \frac{c^2 - (a - b)^2}{(b + c)^2 - a^2}$ is:

$\frac{a^2 - (b - c)^2}{(a + c)^2 - b^2} + \frac{b^2 - (a - c)^2}{(a + b)^2 - c^2} + \frac{c^2 - (a - b)^2}{(b + c)^2 - a^2}$ का मान क्या होगा?

(SSC CPO 2023)

[A] 3

[B] -1

[C] 1 ✓

[D] 2

put $c=0$

$a=1, b=2$

$$\frac{1^2 - (2 - 0)^2}{(1 + 0)^2 - 2^2} + \frac{2^2 - (1 - 0)^2}{(1 + 2)^2 - 0^2} + \frac{0^2 - (1 - 2)^2}{(2 + 0)^2 - 1^2}$$
$$= \frac{1 - 4}{1 - 4} + \frac{4 - 1}{9 - 0} + \frac{0 - 1}{4 - 1}$$
$$= \frac{-3}{-3} + \frac{3}{9} + \frac{-1}{3}$$
$$= 1 + \frac{1}{3} - \frac{1}{3}$$
$$= 1$$

17. If $p = \sqrt[3]{a + \sqrt{a^2 + b^3}} + \sqrt[3]{a - \sqrt{a^2 + b^3}}$, then what is $p^3 + 3bp$ equal to?

यदि $p = \sqrt[3]{a + \sqrt{a^2 + b^3}} + \sqrt[3]{a - \sqrt{a^2 + b^3}}$ तो $p^3 + 3bp$ किसके बराबर है?

(CDS-1 2024)

[A] $-2a$

[B] a

[C] $2a$

[D] $3a$

but $b=0$

$$b = \sqrt[3]{a^3} \Rightarrow b^3 = a^3$$

$$= 2a$$



18. If $(a + b + c) = 19$, and $(a^2 + b^2 + c^2) = 155$, find the value of $(a - b)^2 + (b - c)^2 + (c - a)^2$.

अगर $(a + b + c) = 19$ और $(a^2 + b^2 + c^2) = 155$ है, तो $(a - b)^2 + (b - c)^2 + (c - a)^2$ का मान ज्ञात कीजिए।

[A] 104

[B] 108

[C] 100

[D] 98

$$= 2a^2 + 2b^2 - 2ab$$

$$= 2 \cdot (a^2 + b^2 - ab)$$

$$= 2 \times (155 - 103)$$

$$= 104$$

$\begin{cases} 2 \text{ eq}^n \\ 3 \text{ variables} \end{cases}$

put $c = 0$

$$\begin{array}{r} 36 \\ -155 \\ \hline \end{array}$$

$$a + b = 19$$

$$a^2 + b^2 = 155$$

$$ab = \frac{19^2 - 155}{2}$$

$$= \frac{206}{2}$$

$$= 103$$

19. If $\frac{a}{b+c} + \frac{b}{c+a} + \frac{c}{a+b} = 1$, then find $\frac{a^2}{b+c} + \frac{b^2}{c+a} + \frac{c^2}{a+b} = ?$

यदि $\frac{a}{b+c} + \frac{b}{c+a} + \frac{c}{a+b} = 1$ है, तो $\frac{a^2}{b+c} + \frac{b^2}{c+a} + \frac{c^2}{a+b}$ ज्ञात कीजिए।

[A] 0

[B] -2

[C] 3

[D] 1

$$\frac{a^2}{b} + \frac{b^2}{a} = \frac{a^3 + b^3}{ab} = 0$$

1 eqⁿ

put C=0

a, b & C

$$\left(\frac{a}{b}\right) + \left(\frac{b}{a}\right) = 1$$

$$\Rightarrow \left(\frac{a}{b}\right)^3 = -1$$

$$a^3 = -b^3$$

$$x + \frac{1}{x} = 1$$

$$\Rightarrow x^3 = -1$$

20. If $\left[\sqrt{a^2 + b^2 + ab}\right] + \left[\sqrt{a^2 + b^2 - ab}\right] = 1$, then what is the value of $(1-a^2)(1-b^2)$?

यदि $\left[\sqrt{a^2 + \cancel{b^2 + ab}}\right] + \left[\sqrt{a^2 + \cancel{b^2 - ab}}\right] = 1$ है, तो $(1-a^2)(1-\cancel{b^2})$ का मान क्या है?

[A] $1/4$

[B] $4/7$

[C] $5/4$

[D] $\frac{3}{4}$

$$= \left(1 - \frac{1}{4}\right) \times 1 = \frac{3}{4}$$

$\log^n$
 $\rightarrow a, b$

$$\text{put } b=0$$

$$a+a=1$$

$$\Rightarrow a = \frac{1}{2}$$

21. If $a + b + c = 13$ and $ab + bc + ca = 4$, then what is the value of $ab(a + b) + bc(b + c) + ca(c + a) + 3abc$?

यदि $a + b + c = 13$ और $ab + bc + ca = 4$ है, तो $ab(a + b) + bc(b + c) + ca(c + a) + 3abc$ का मान कितना होगा?

(RRB NTPC 12th LEVEL CBT-1 2026)

[A] 38

[B] 9

[C] 17

[D] 52

$$= ab(a+b)$$

$$= 4 \times 13$$

$$= 52$$

संकेत
→ a, b, c

but $c=0$

22. If $a+b+c=6$ and $a^2+b^2+c^2=38$, then what is the value of $a(b^2+c^2)+b(c^2+a^2)+c(a^2+b^2)+3abc$?

यदि $a+b+c=6$ और $a^2+b^2+c^2=38$ है, तो $a(b^2+c^2)+b(c^2+a^2)+c(a^2+b^2)+3abc$ का मान ज्ञात कीजिए।

[A] 3

[B] -3

[C] 6

[D] -6

$$= ab^2 + ba^2$$

$$= ab(b+a)$$

$$= -1 \times 6$$

$$= -6$$

put $c=0$

$$a+b=6$$

$$a^2+b^2=38$$

$$\begin{aligned} \text{तो } ab &= \frac{6^2 - 38}{2} \\ &= -1 \end{aligned}$$

23. What is the simplified value of $\frac{(x+y+z)(xy+yz+zx)-xyz}{(x+y)(y+z)(z+x)}$?

$\frac{(x+y+z)(xy+yz+zx)-xyz}{(x+y)(y+z)(z+x)}$ का सरलीकृत मान क्या है?

(SSC CGL Mains 2021)

[A] ~~z~~

[C] 1

[B] ~~x~~

[D] ~~y~~

put $x=2$

$y=3$

$z=0$

$$\frac{5 \times 6}{5 \times 6} = 1$$

24. If $(a+b+c)=20$ & $\frac{1}{a} + \frac{1}{b} + \frac{1}{c} = 30$, then find the value of $\left(\frac{a}{b} + \frac{b}{a} + \frac{b}{c} + \frac{c}{b} + \frac{c}{a} + \frac{a}{c}\right)$?

यदि $(a+b+c)=20$ & $\frac{1}{a} + \frac{1}{b} + \frac{1}{c} = 30$ है, तो $\left(\frac{a}{b} + \frac{b}{a} + \frac{b}{c} + \frac{c}{b} + \frac{c}{a} + \frac{a}{c}\right)$ का मान ज्ञात कीजिये?

[A] 597

[B] 599

[C] 600

[D] cannot find

$$= (a+b+c) \cdot \left(\frac{1}{a} + \frac{1}{b} + \frac{1}{c}\right) - 3$$

$$= 20 \times 30 - 3$$

$$= 597$$

Special सवाल

$$(a+b+c) \cdot \left(\frac{1}{a} + \frac{1}{b} + \frac{1}{c}\right) = \cancel{1} + \frac{a}{b} + \frac{a}{c} + \frac{b}{a} + \cancel{1} + \frac{b}{c} + \frac{c}{a} + \frac{c}{b} + \cancel{1}$$

25. If $x + \frac{1}{y} = 1$ and $y + \frac{1}{z} = 1$, then find the value of $z + \frac{1}{x}$?

यदि $x + \frac{1}{y} = 1$ और $y + \frac{1}{z} = 1$ है, तो $z + \frac{1}{x}$ का मान ज्ञात कीजिए?

[RRB NTPC - 2021]

[A] 1 ✓

[C] -1

[B] 2

[D] 0

$$= \frac{1}{1-y} + \frac{y}{-(1-y)}$$

$$= \frac{1-y}{1-y}$$
$$= 1$$

$$x = 1 - \frac{1}{y}$$

$$x = \frac{y-1}{y}$$

$$\frac{1}{x} = \frac{y}{y-1}$$

$$\frac{1}{z} = 1 - y$$

$$z = \frac{1}{1-y}$$

25. If $x + \frac{1}{y} = 1$ and $y + \frac{1}{z} = 1$, then find the value of $z + \frac{1}{x}$?

यदि $x + \frac{1}{y} = 1$ और $y + \frac{1}{z} = 1$ है, तो $z + \frac{1}{x}$ का मान ज्ञात कीजिए?

[RRB NTPC - 2021]

[A] 1

[C] -1

[B] 2

[D] 0

संलग्न
1. x, y, z

Let $z = 2$

$$y + \frac{1}{2} = 1 \Rightarrow y = \frac{1}{2}$$

$$x + 2 = 1 \Rightarrow x = -1$$

26. If $p + \frac{1}{m} = m + \frac{1}{n} = n + \frac{1}{p}$ ($p \neq m \neq n$), then the value of $p \times m \times n$ is:

यदि $p + \frac{1}{m} = m + \frac{1}{n} = n + \frac{1}{p}$ ($p \neq m \neq n$) है, तो $p \times m \times n$ का मान ज्ञात कीजिए।

(SSC CGL Mains 2016) (RRB NTPC GRADUATE LEVEL CBT-1 2026)

[A] ± 2

[B] $\pm \frac{1}{2}$

~~[C] ± 1~~

[D] 0

$$1 = \frac{1}{m^2 n^2 p^2}$$

$$m^2 n^2 p^2 = 1$$

$$mnp = \pm 1$$

~~$p - m = \frac{m - n}{mn}$~~

~~$m - n = \frac{n - p}{pn}$~~

~~$n - p = \frac{p - m}{pm}$~~

27. If $\frac{m-a^2}{b^2+c^2} + \frac{m-b^2}{c^2+a^2} + \frac{m-c^2}{a^2+b^2} = 3$, then find the value of m?

यदि $\frac{m-a^2}{b^2+c^2} + \frac{m-b^2}{c^2+a^2} + \frac{m-c^2}{a^2+b^2} = 3$, तो m का मान ज्ञात कीजिए।

[A] ~~$a^2 + b^2 - c^2$~~

[B] $a^2 + b^2$

☒ [C] $a^2 + b^2 + c^2$

[D] $a^2 - b^2 - c^2$

$$\frac{(a^2 + b^2 + c^2) - a^2}{b^2 + c^2}$$

$$1 + 1 + 1 = 3$$

28. If $x^2 = y + z$, $y^2 = z + x$ and $z^2 = x + y$, then find the value of $\frac{1}{x+1} + \frac{1}{y+1} + \frac{1}{z+1}$.

यदि $x^2 = y + z$, $y^2 = z + x$ और $z^2 = x + y$ है, तो $\frac{1}{x+1} + \frac{1}{y+1} + \frac{1}{z+1}$ का मान ज्ञात कीजिए।

[RRB Group D-2022]

[A] 4

[C] 1

[B] -1

[D] 2

$$= \frac{1}{3} \times 3 = 1$$

symmetric

$$\text{but } x = y = z = 2$$

$$(3x + 17 - 2y) \times (3x - 17 - 2y)$$

$$= (3x - 2y)^2 - 17^2$$

29. Simplify the following expression:

निम्नलिखित व्यंजक को हल कीजिए:

$$(3x + 17 - 2y)(3x - 17 - 2y)$$

[A] $9x^2 - 12xy + 4y^2 + 289$

[B] $9x^2 + 12xy + 4y^2 - 289$

☒ [C] $9x^2 - 12xy + 4y^2 - 289$

[D] $9x^2 - 6xy + 4y^2 - 289$

30. The factors of $(a^2 + 4b^2 + 4b - 4ab - 2a - 8)$ are?

$(a^2 + 4b^2 + 4b - 4ab - 2a - 8)$ गुणनखंड क्या होंगे?

(SSC CGL Mains 2014) (SSC CGL PRE 2022)

[A] $(a - 2b - 4)(a - 2b + 2)$ $-4ab$

[B] $(a - b + 2)(a - 4b - 4)$ $-5ab$

[C] $(a + 2b - 4)(a + 2b + 4)$

[D] $(a + 2b - 1)(a - 2b + 1)$

but $a=b=0$

Q.6

31. Simplify the given expression.

दिए गए व्यंजक को सरल कीजिए।

$$\frac{x^2+3x-10}{x^2-25} \times \frac{x^2+3x+2}{x^2-4} \times \frac{x(x+2)}{(x+1)^2+(x+1)}$$

[RRB Group D-2022]

[A] $\frac{x}{x-5} = \frac{1}{-4}$

[B] $\frac{x-5}{x}$

[C] $\frac{x}{x+5}$

[D] $\frac{x+5}{x}$

$\frac{-6}{-24} \times \frac{6}{-3} \times \frac{3}{6}$

$= -\frac{1}{4}$

put $x=1$

32. If $\frac{p}{b-c} = \frac{q}{c-a} = \frac{r}{a-b}$, then find the value of $p + q + r$.

यदि $\frac{p}{b-c} = \frac{q}{c-a} = \frac{r}{a-b}$ हो, तो $p + q + r$ का मान ज्ञात कीजिए।

[RRB JE - 2019]

[A] -1

[C] 2

[B] 1

[D] 0

H.W