

Hw = 30/7/21

Name - Swarit Nath  
class - VI sec - B



Ex = 19(A)

1. Fill in the blanks.

(i)  $5+4 = 9$  and  $5z+4z = 9z$

(ii)  $12+18 = 30$  and  $12z^2y+18z^2y = 30z^2y$

(iii)  $7+16 = 23$  and  $7a+16b =$

(iv)  $1+3 = 4$  and  $z^2y+3z^2y = 4z^2y$

(v)  $7-4 = 3$ , and  $7ab-4ab = 3ab$

(vi)  $12-5 = 7$  and  $12z-5y =$

(vii)  $35-16 = 19$  and  $35ab-16ba = 19ab$

(viii)  $28-13 = 15$  and  $28z^2-13z^2 = 15z^2$

2. Fill in the blanks:

(i) The sum of  $-2$  and  $-5 = -7$  and the sum of  $-2z$  and  $-5z = -7z$ .

(ii) The sum of  $8$  and  $-3 = 5$  and the sum of  $8ab$  and  $-3ab = 5ab$

(iii) The sum of  $-15$  and  $-4 = -19$  and the sum of  $-15z$  and  $-4z = -19z$

(iv)  $15 + 8 + 3 = 26$  and:  $15z + 8y + 3z = 18z + 8y$

(v)  $12 - 9 + 15 = 18$  and  $12ab - 9ab + 15ba = 18ab$

(vi)  $25 = 7 - 9 = 9$  and  $25zy = 9zy$   
 $- 7zy - 9yz = 9zy$

(vii)  $-4 - 6 - 5 = -15$  and  $-4az - 6az - 5ay = -10az - 5ay$

3. (i)  $8xy + 3xy = 11xy$

(ii)  $2zyz + 2zyz + 6zyz = 9zyz$

(iii)  $2a + 3a + 4b = 5a + 4b$

(iv)  $3z + 2y =$  \_\_\_\_\_

(v)  $5m + 3n + 4p =$  \_\_\_\_\_

(vi)  $6a + 3a + 9ab = 9a + 9ab$

(vii)  $3p + 4q + 9q = 3p + 13q$

(viii)  $5ab + 4ba + 6b = 9ab + 6b$

(ix)  $50pqt + 30pqt + 10prt = 80pqt + 10prt$

(x)  $(-2y) + (-y) + (-3y) = -6y$

$$(xi) (3b) + (b) = (4b)$$

$$(xii) 5b + (-4b) + (-10b) \\ = 5b - 4b - 10b = -9b$$

$$(xiii) (-2c) + (-c) + (-5c) = -3c + -5c = -6c$$

$$4. (i) 6a - a - 5a - 2a = \\ 5a - 5a - 2a = -2a$$

$$(ii) 2b - 3b - b + 4b \\ = -1b - b + 4b \\ = -2b + 4b \\ = 2b$$

$$(iii) 3z - 2z - 4z + 7z \\ - 3z + 7z = 4z$$

$$(iv) 5ab + 2ab - 6ab + ab \\ = 2ab$$

$$(v) 8z - 5y - 3z + 10y \\ = 8z - 3z = 5z \quad \downarrow \\ 5y + 10y = 15y \\ = 5z - 15y \quad \downarrow$$

$$5. (i) -7z + 9z + 2z - 2z \\ = 2z + 2z - 2z \\ = 4z - 2z \\ = 2z$$

$$(ii) 5ab - 2ab - 8ab + 6ab$$

$$= 3ab - 8ab + 6ab$$

$$= -5ab + 6ab$$

$$= 1ab$$

$$(iii) -8a - 3a + 13a + 13a - 6a$$

$$\text{Ans} = -11a + 12a + 13a - 6a$$

$$= 1a + 13a - 6a$$

$$= 14a - 6a$$

$$= 8a$$

$$(iv) 19abc - 11abc - 12abc + 14abc$$

$$\text{Ans} = 8abc - 12abc + 14abc$$

$$= -4abc + 14abc$$

$$= 10abc$$

6. Subtract the first term from the second:

$$\text{Ans} = \text{---} \quad (i) 4ab - 6ab = -2ab$$

$$(ii) 4 \cdot 8b - 6 \cdot 8b = -2 \cdot 8b$$

$$(iii) 3 \cdot 5abc - 10 \cdot 5abc = -7 \cdot 0abc$$

$$(iv) 3 \frac{1}{2} mn - 8 \frac{1}{2}$$

$$= \frac{7}{2} mn - \frac{17}{2} mn = \frac{-10}{2} mn = 5mn$$

7. Simplify

$$(i) 2a^2b^2 + 5ab^2 + 8a^2b^2 - 3ab^2$$

$$= 2a^2b^2 + 8a^2b^2 + 5ab^2 - 3ab^2$$

$$10a^2b^2 - 2ab^2$$

$$\begin{aligned} \text{(ii)} \quad & 4a + 3b - 2a - b \\ &= 4a - 2a + 3b - b \\ &= 2a + 2b \end{aligned}$$

$$\begin{aligned} \text{(iii)} \quad & 2xy + 4yz + 5zy + 3yz - 6zy \\ &= 2xy + 5zy - 6zy + 4yz + 3yz \\ &= 4yz + 3yz = 7yz \end{aligned}$$

$$\begin{aligned} \text{(iv)} \quad & ab + 15ab - 11ab - 2ab \\ &= ab - 2ab + 15ab - 11ab \\ &= ab + 15ab - 11ab - 2ab \\ &= 16ab - 13ab \\ &= 3ab \end{aligned}$$

$$\begin{aligned} \text{(v)} \quad & 6a^2 - 3b^2 + 2a^2 + 5b^2 - 4a^2 \\ \text{Ans} = & 6a^2 + 2a^2 - 4a^2 + 3b^2 + 5b^2 \\ &= 4a^2 + 8b^2 \end{aligned}$$

$$\begin{aligned} \text{(vi)} \quad & 8abc + 2ab - 4abc + a^2b \\ \text{Ans} = & 8abc - 4abc + 2ab + a^2b \\ &= 4abc + 3ab \end{aligned}$$

$$\begin{aligned} \text{(vii)} \quad & 9xyz + 15y^2z - 10xyz - 2zxy \\ &= 12xyz \end{aligned}$$

$$\begin{aligned} \text{(viii)} \quad & 13pqr + 2p + 4q - 6pqr + 5pqr \\ &= 13pqr - 6pqr + 5pqr + 2p + 4q \\ &= 12pqr + 2p + 4q \end{aligned}$$

$$\begin{aligned} \text{(ix)} \quad & 4ab + 0 - 2ba \\ &= 4ab - 2ba = 2ab - 0 = 2ab \end{aligned}$$

$3a^2$   
 $b^2 + 8a^2$   
 $^2 + 6a^2$   
(Ans.)  
on prefixed.  
cket.



(20)  $6ze^2y - 2ze^2y + 5ze^2y - 2ey^2$   
Ans:  ~~$6ze^2y$~~   $6ze^2y + 5ze^2y = 11ze^2y$   
 $2ze^2y + 2ey^2 = 3ze^2y$   
 $11ze^2y + 3ze^2y$