

subtraction also remain same

### Exercise: 19(A)

1. Fill in the blanks.

- |               |    |     |                              |                   |
|---------------|----|-----|------------------------------|-------------------|
| (i) $5 + 4 =$ | 9  | and | $5x + 4x =$                  | $9x$              |
| $12 + 18 =$   | 30 | and | $12x^2y + 18x^2y =$          | $30x^2y$          |
| $7 + 16 =$    | 23 | and | $7a + 16b =$                 | $7a + 16b$        |
| $1 + 3 =$     | 4  | and | $x^2y + 3xy^2 =$             | $x^2y + 3xy^2$    |
| $7 - 4 =$     | 3  | and | $7ab - 4ab =$                | $3ab$             |
| $12 - 5 =$    | 7  | and | $12x - 5y =$                 | $12x - 5y$        |
| $35 - 16 =$   | 19 | and | $35ab - 16ba =$              | $35ab - 16ba$     |
| $28 - 13 =$   | 15 | and | $28a^2x - 13a^2x - 28ax^2 =$ | $15a^2x - 28ax^2$ |

2. Fill in the blanks:

- i. The sum of  $-2$  and  $-5 = -7$  and the sum of  $-2x$  and  $-5x = -7x$
- ii. The sum of  $8$  and  $-3 = 5$  and the sum of  $8ab$  and  $-3ab = 5ab$
- iii. The sum of  $-15$  and  $4 = -11$  and the sum of  $-15x$  and  $4y = -15x + 4y$
- iv.  $15 + 8 + 3 = 26$  and the sum of  $15x + 8y + 3z = 15x + 8y + 3z$
- v.  $12 - 9 + 15 = 18$  and  $12ab - 9ab + 15ba = 18ab$
- vi.  $25 - 7 - 9 = 9$  and  $25xy - 7xy - 9xy = 9xy$
- vii.  $-4 - 6 - 5 = -15$  and  $-4ax - 6ax - 5ay = -10ax - 5ay$

3. Add:

- i.  $8xy$  and  $3xy: 8xy + 3xy = 11xy$
- ii.  $2xyz$ ,  $xyz$  and  $6xyz: 2xyz + xyz + 6xyz = 9xyz$
- iii.  $2a$ ,  $3a$  and  $4b: 2a + 3a + 4b = 5a + 4b$
- iv.  $3x$  and  $2y: 3x + 2y$
- v.  $5m$ ,  $3n$  and  $4p: 5m + 3n + 4p$
- vi.  $6a$ ,  $3a$  and  $4b: 6a + 3a + 4b = 9a + 4b$
- vii.  $-2y$ ,  $-y$  and  $-3y: -2y + (-y) + (-3y) = -6y$
- viii.  $-3b$  and  $-b: -3b + (-b) = -4b$
- ix.  $5b$ ,  $-4b$  and  $-10b: 5b + (-4b) + (-10b) = -9b$
- x.  $-2c$ ,  $-c$  and  $-5c: -2c + (-c) + (-5c) = -8c$
- xi.  $3p$ ,  $4q$  and  $9q: 3p + 4q + 9q = 3p + 13q$
- xii.  $5ab$ ,  $4ba$  and  $6b: 5ab + 4ba + 6b = 9ab + 6b$
- xiii.  $50pq$ ,  $30pq$  and  $10pr: 50pq + 30pq + 10pr = 80pq + 10pr$

4. Evaluate.

and -5z

and -3ab

and -4y

18x + 8y

-5ay

4. Evaluate:

i)  $6a - a - 5a - 2a$

Sol<sup>n</sup>:  $= 8a - 5a - 2a$   
 $= 3a - 2a$

ii)  $2b - 3b - b + 4b$

Sol<sup>n</sup>:  $= -2b + 4b = 2b$

iii)  $3x - 2x - 4x + 7x$

Sol<sup>n</sup>:  $= x - 4x + 7x$   
 $= -3x + 7x$   
 $= 4x$

iv)  $5ab + 2ab - 6ab + ab$

Sol<sup>n</sup>:  $= 7ab - 6ab + ab$   
 $= ab + ab$   
 $= 2ab$

v)  $8x - 5y - 3x + 10y$

Sol<sup>n</sup>:  $= 8x - 3x - 5y + 10y$   
 $= 5x + 5y$

5. Evaluate

i)  $-7x + 9x + 2x - 2x$

Sol<sup>n</sup>:  $= -7x + 9x + 2x - 2x$   
 $= 2x$

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

Sol<sup>n</sup>:  $= 3ab - 8ab + 6ab$   
 $= 3ab - 2ab$   
 $= ab$

ii)  $-8a - 3a + 12a + 3a - 6a$

Sol<sup>n</sup>:  $= 11a + 25a - 6a$   
 $= 14a - 6a$   
 $= 8a$

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

Sol<sup>n</sup>:  $= 8abc + 2abc$   
 $= 10abc$

6. Subtract the first term from the second:

i)  $4ab, 6ba$

Sol<sup>n</sup>:  $6ab - 4ab = 6ab - 4ab$   
 $= 2ab$

ii)  $4.8b, 6.8b$

Sol<sup>n</sup>:  $= 6.8b - 4.8b$   
 $= 2b$

iii)  $3.5abc, 10.5abc$

Sol<sup>n</sup>:  $= 10.5abc - 3.5abc$   
 $= 7abc$

iv)  $3\frac{1}{2}mn, 8\frac{1}{2}nm$

Sol<sup>n</sup>:  $= 8\frac{1}{2}nm - 3\frac{1}{2}mn$   
 $= \frac{17}{2}nm - \frac{7}{2}mn$   
 $= \frac{17mn - 7mn}{2} = \frac{10mn}{2} = 5mn$