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 $-3ab = 13x + 4y$

(iii) The sum of 15 and $-4 = -19$ and the sum of $-15x$ and $-4y = -5x + 4y$

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

(v) $12 - 9 + 15 = 31$ and $12ab - 9ab + 15ba = 18ab$

(vi) $25-7-9$

Ans 9

and $25xy - 7xy - 9yx$

Ans $9xy$

3 Add:

8xy and 3xy

Ans → 8xy + 3xy = 11xy

(ii) 5m, 3n and 4p

Ans 2xyz + 1xyz + 6xyz = 9xyz

(iii) 2a, 3a and 4b

Ans → 2a + 3a + 4b = 5a + 4b.

(iv) 3x and 2y

Ans → 3x + 2y

(v) 5m, 3n and 4p

Ans → 5m + 3n + 4p

(vi) 6a, 3a and 9ab

Ans → 9a and 9xy

(vii) 3p, 4q and 9q

Ans → 3p and 13q

(viii) 5ab, 4ba and 6b

Ans → 9ab and 6b

(ix) 50pq, 30pq and 10pr

Ans → 80pq and 10pr

(x) $-2y$, $-y$ and $-3y$

Ans → $-2y + -1y + -3y = -6y$

(xi) $-3b$ and $-b$

Ans $-3 + -1b = -4b$

(xii) $5b$, $-4b$ and $-10b$

Ans $5b + -4b + -10b = -9b$

(xiii) $-2c$, $-c$ and $-5c$

Ans $-2c + -1c + -5c = -8c$

4. Evaluate:

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

Ans → $6a - 1a - 5a - 2a$

$= 6a - 8a = -2a$

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

Ans $2b - 3b - b + 4b$

$= 2b + 4b - 3b - b$

$= 6b - 4b$

$= 2b$

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

Ans $3x - 2x - 4x + 7x$

$\Rightarrow 3x + 7x = 10$

$3x - 6x + 7x$

$10x - 6x = 4$

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

Ans $\Rightarrow 5ab + 7ab - 6ab + ab$

$8ab - 6ab = 2ab$

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

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

$8x - 3x = 5x$

$= 10y - 5y = 5y$

$= 5x + 5y$

(5) Evaluate

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

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

$= -9x + 11x = 2x$

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

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

Ans) $5ab + -10ab + 6ab$

$15ab - 10ab = 1ab$

(iii) $-8a - 3a + 12a + 13a - 6a$

Ans) $-8a - 3a + 12a + 13a - 6a$

$17a + 25a = 8a$

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

$\therefore 19abc - 11abc - 12abc$

$+14abc$

$33abc - 23abc = 10abc$

(i) $4ab, 6ba$

Ans → $4ab - 6ba = 2ba$

(ii) $4.8b, 6.8b$

Ans → $4.8b - 6.8b = 2b$

(iii) $3.5abc, 10.5abc$

Ans → $3.5abc - 10.5abc = 7abc$

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

Ans → $3\frac{1}{2} - 8\frac{1}{2} = 5mn$

(2) Simplify:

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

Ans →

2. Simplify:

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

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

$10a^2b^2 + 2ab^2$

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

Ans $4a + 3b - 2a - b$

$2a + 2b$

(iii) $2xy + 4yz + 5xy + 3yz - 6xy$

Ans $2xy + 4yz + 5xy + 3yz - 6xy$

$2xy + 4yz + 3yz - 6xy$

$xy + 7yz$

(iv) $ab + 15ab - 11ab - 2ab$

Ans $ab + 15ab - 11ab - 2ab$

$16ab - 13ab = 3ab$

(v) $8a^2 - 3b^2 + 2a^2 + 5b^2 - 4a^2$

Ans $8a^2 - 3b^2 + 5b^2 - 4a^2$

$4a^2 + 2b^2$

(vi) $8abc + 2ab - 4abc + ab$

Ans → $8abc + 2ab - 4abc + ab$

$4abc + 3ab$

(vii) $9xyz + 15yxz - 10zyx - 2zxy$

Ans → $9xyz + 15yxz - 10zyx - 2zxy$

$2xyz + 5yxz$

(viii) $13pqr + 2p + 4q - 6pqr + 5pqr$

Ans → $13pqr + 2p + 4q - 6pqr + 5pqr$

$18pqr + 2p + 4q - 6pqr$

$12pqr + 2p + 4q$

(ix) $4ab + 0 - 2ba$

Ans → $4ab + 0 - 2ba$

$2ab$

(x) $6x^2y - 2xy^2 + 5x^2y - xy^2$

Ans → $6x^2y - 2xy^2 + 5x^2y - xy^2$

$= 11x^2y - 3xy^2$