Exercise - 19 (A)

~~Add~~

1. i) $5+4=9$ and $5x+4x=9x$
ii) $12+18=30$ and $12x^2y+18x^2y=30x^2y$
iii) $7+16=23$ and $7a+16b=7a+16b$
iv) $1+3=4$ and $x^2y+3xy^2=x^2y+3xy^2$
v) $7-4=3$ and $7ab-4ab=3ab$
vi) $12-5=7$ and $12x-5y=12x-5y$
vii) $35-16=19$ and $35ab-16ba=19ab$
viii) $28-13=15$ and $28ax^2-13a^2x=28ax^2-13a^2x$

2. i) $-2+(-5)=-2-5=-7$ and $-2x+(-5x)=-7x$
ii) $8+(-3)=5$ and $8ab+(-3ab)=-5ab$
iii) $-15+(-4)=-15-4=-19$ and $-15x+(-4y)=-15+(-4y)$
iv) $15+8+3=26$ and $15x+8y+3x=18x+8y$
v) $12-9(+15)=18$ and $12ab-9ab+15ba=18ab$
vi) $25-7-9=9$ and $25xy-7xy-9yx=9xy$
vii) $-4-6-5=-15$ and $-4ax-6ax-5ay=-10ax-5$

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

(Maths)

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

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

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

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

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

$= 8x - 3x - 5y + 10y$

$= 5x + 5y$

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

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

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

iv) $19abc - 11abc - 12abc + 14abc = 10abc$

6 i) $4ab, 6ba = \cancel{4ab}\ 6ba - 4ab = 2ab$

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

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

iv) $3\frac{1}{2}mn, 8\frac{1}{12} = 8\frac{1}{2} - 3\frac{1}{2} = 5mn$

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

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

+

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

$= 2a + 2b$

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

$= xy + 7yz$

iv) $ab + 15ab - 11ab - 2ab$
$= 3ab$

v) $(6a^2 + 2a^2 - 4a^2) + (3b^2 + 5b^2)$
$= 4a^2 + 8b^2$

vi) $(8abc - 4abc) + (2ab + ab)$
$= 4abc + 1ab$

vii) $9xyz + 9xyz + 15yxz - 10zyx - 2zxy$
$= 12xyz$

viii) $(13pqr - 6pqr + 5pqr) + (2p + 4q)$
$= 12pqr + 2p + 4q$

ix) $(4ab - 2ba) + c$
$= 6ab + c$
$= 6ab$

x) $(6x^2y + 5x^2y) - (2xy^2 - xy^2)$
$= 11x^2y - 3xy^2$