0.H.W
26 to 21

EX:-19(A)

1. i) $5+4=9$ and $5x+4x=9x$

ii) $12+18=29$ and $12x^2y+18x^2y=29x^2y$

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 $35ab-16ba=35ab-16ba$

viii) $28-13=15$ and $28ax^2-13a^2x=28ax^2-13a^2x$

2. i) -7 and $-7x$

ii) 5 and $5ab$

iii) -19 and $-15x$ and $4y$

iv) 26 and $15x$ and $4y$

v) 18 and $12ab-9ab$

vi) 9 and $25xy-7xy$

vii) $-15a$ and $-4ax-6a$

Say

3. i) Addition of $8xy$ and $3xy$ is $= 8xy + 3xy$
$= 11xy$

ii) Addition of $2xyz$, xyz and $6xy$ = They are unlike terms so they can't be added = $2xyz$, xyz and $6xy$

iii) Addition of $2a$, $3a$ and $4b$ = They are unlike terms so they can't be added = $2a$, $3a$ and $4b$.

iv) Addition of $3x$ and $2y$ = They are unlike terms so they can't be added = $3x$ and $2y$

v) $5m$, $3n$ and $4p$ = Addition of $5m$, $3n$ and $4p$ = They are unlike terms so they can't be added = $5m$, $3n$ and $4p$

vi) Addition of $6a$, $3a$ and $9ab$ = They are unlike terms so they can't be added = $6a$, $3a$ and $9ab$

vii) Addition of $3p$, $4r$ and $9r$ = They are not possible.
$= 3p$, $4r$ and $9r$

viii) Addition of $5ab$, $4ba$ and $6b$ = They are not possible
$= 5ab$, $4ba$ and $6b$

ix) Addition of $50pr$, $30pr$ and $10pr$ = They are not possible.
$= 50pr$, $30pr$ and $10pr$

x) $-2y - x$ and $-3y = -2y - 3y$
$= -5y$

xi) $-3b - b = -3b + b$
$= -3b$

xii) $5b - 4b$ and $-10b = 5b + 4b$ and $10b$
$= 15b + 4b = 19b$

xiii) -2 and $-5c$

A⇒ $= (-2) - (-5)$

$= -7$

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

A⇒ $6a - 5a - a - 2a = 6a - 8a = -2a$

$= 1a - 2a$

$= -2a - 1a = -1a$

$= a - 1 = (-1) - 1 = -2a$

$= (-1)$

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

A⇒ $= 2b + 4b - 3b - b$

$= 6b - 4b = 2b$

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

A⇒ $10x - 6x = 4x$

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

A⇒ $= 7ab - 5ab = 2ab$

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

A⇒ $8x - 3x - 5y + 10$

$= 5x + 5y$

5. i) $-7x + 7x + 2x - 2x$

$= 7x - 2x + 2x - 7x$

$= 7x - 7x + 2x = 2x$

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

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

$= 11ab - 10ab$

$= ab$

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

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

$= 25a - 17a$

$= 8a$

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

$= 14abc + 14abc - 12abc - 12abc$

$= 33abc - 23abc = 10abc$

6. i) $4ab, 6ba$

A) $6ba - 4ab = 2ab$

ii) $4.8b, 6.8b$

A) $6.8b - 4.8b = 2b$

iii) $3.5abc, 10.5abc$

A) $10.5abc - 3.5abc = 7abc$

nn = mn
= 3x2 = 243

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

$= 8\frac{1}{2}nm - 3\frac{1}{2}mn$

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

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

$= 5mn$

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

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

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

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

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

$= 2a - 2b$

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

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

$= xy + 7yz$

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

$= 15ab - 2ab - 11ab + ab$

$= 13ab - 10ab = 3ab$

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

$= 6a^2 - 4a^2 + 2a^2 + 5b^2 - 3b^2$

$= 4a^2 + 2b^2$

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

$= 8abc - 4abc + ab + 2ab$
$= 4abc + 3ab$

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

$= 24xyz - 12xyz = 12xyz$

viii) ~~$13pvr$~~ $13pvr + 2p + 4q - 6pvr + 5pvr$

$= 13pvr + 5pvr - 6pvr + 2p + 4q$
$= 12pvr + 2p + 4q$

Ix) $4ab + 0 - 2ab$

$= 4ab - 2ab = 2ab$

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

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

O.C.W 22.7.24

Addition of Polynomials (Row method)

$(3a + 4b + 7c) + (-5a + 3b - 6c) + (4a - 2b - 4c)$

$= 3a + 4b + 7c - 5a + 3b - 6c + 4a - 2b - 4c$
$= +3a - 5a + 4a + 4b + 3b - 2b + 7c + 6c - 4c$
$= 2a + 5b + 7c - 10c$
$= 2a + 5b - 3c$