

11. $4ax + 8by - 3cz$; $ax + 3by - cz$; $-3ax - 2by + 4cz$.
12. $20p + q - r$; $3p - 20q + r$; $p + q - 20r$.
13. $6m - 13n + 5p$; $8m + n - 9p$; $m + 2n + 5p$.
14. $5ab + 6cy - 3$; $-8ab - 3cy + 11$; $-7ab + 12cy + 7$.
15. $13xy - 5z + 8$; $-7xy + 5z - 18$; $-6xy + 13z + 10$.

B.

1. $-4ab + 6bc - 7ca$; $5ab - 3bc + 7ca$; $-2ab - 2bc + 4ca$.
2. $14ab - 28bc - 17ca$; $13ab + 45bc - 3ca$; $12ab - 18bc + 10ca$
3. $pq - qr - rp$; $-pq - qr + rp$; $pq - qr + rp$.
4. $x + y + z$; $3x - 4y + z$; $2x + 3y - 2z$.
5. $3a + 24b + 17c$; $16a - 23b - 9c$; $a - 3b + c$.
6. $4xy - 9yz + zx$; $23xy - 14yz + zx$; $12xy - 13yz - zx$.
7. $47x - y + 63z$; $-27x + 5y - 13z$; $-22x - 47y - 19z$.
8. $23a - 17bc - 2d$; $5a - 16bc - 13d$; $-a + 9bc - d$.
9. $ax - 4by + 3cz$; $13ax - 9by + 7cz$; $-5ax + 7by - 14cz$.
10. $2a + 3b + c$; $4b + 5c - 6d$; $17a - 13c + 19d$.

EXERCISE V.

Add together the following expressions :

A.

1. $3ab - 2bc - 3ca$; $2ab + 3ca + 6abc$; $-5ab + 2bc - 5abc$.
2. $3x^2 - 5xy + 6y^2$; $4x^2 + 6xy - 3y^2$; $4y^2 + 6x^2 - 7xy$.
3. $3a^2 - 7ab + 5b^2$; $4ab - 5a^2 + 3b^2$; $b^2 - 4a^2 + 9ab$.
4. $x^2 - xy + y^2$; $3x^2 + 4xy - 5y^2$; $6x^2 + xy + 5y^2$.
5. $x^2 + xy + y^2$; $-z^2 + yz - y^2$; $-x^2 + xz + z^2$.
6. $a^3 - a^2 + a - 1$; $2a^3 - 4a^2 - 6a + 7$; $5a^3 - 4a^2 - a + 9$.
7. $5x^4 - 3x^3 + 2x^2$; $x^4 + 7x^3 - 8x^2$; $9x^4 - 12x^3 - 15x^2$.
8. $12x^3 + 5x - 8$; $3x^3 - 4x^2 - 6$; $7x^3 - 41x - 19$.
9. $a^3 - ab - bc$; $ab + b^3 - ca$; $ca + bc + c^3$.
10. $5a^3 - 3c^3 + 2d^3$; $b^3 - 2a^3 + 2d^3$; $4c^3 - 2a^3 - 3d^3$.
11. $7x^3 - 8x + 5$; $2x^3 + x - 2$; $x^2 - 7x^3 - 3x + 9$.
12. $x^2 + y^2 + 2xy$; $2z^2 - 3y^2 - 4yz$; $2x^2 - 2z^2 - 3xz$.
13. $4x^3 + 5x^2y + 5xy^2$; $-3x^2y - 7xy^2 - 2x^3$; $7xy^2 - 8x^2y$.