Part 02

wKª‡qwUf †KvwPs †m›Uvi

eûwbev©Pbx IqvK©kxU

Aa¨vqt 4.1

1. **hw` a + b = 6 Ges ab = 8 nq, Z‡e a2 + b2 = ?**

K 8 L 16 M 20 N 36 ⬤

1. **x = n‡j, 8x3 − 12x2 + 6x − 1 Gi gvb KZ?**

K 0 L 1 M 2 N 4 ⬤

1. **− Gi eM© wb‡Pi †KvbwU?**

K x2 − 2x2 + L x2 + 2 +

M x2 + 2 + N x2 − 2 + ⬤

1. **x − = 5 n‡j, Gi gvb KZ?**

K 25 L 29 M 27 N 23 ⬤

1. **x + y = 4 I x − y = 2 n‡j, x I y Gi gvb KZ?**

K (3, 1) L (1, 3) M (− 3, 1) N (3, − 1) ⬤

1. **x + = 2 n‡j, − = KZ?**

K 4 L 2 M 1 N 0 ⬤

1. **a + = 2 n‡j, a2 + Gi gvb wb‡Pi †KvbwU?**

K 2 L 4 M 6 N 8 ⬤

1. **x + y = 4 Ges xy = 1 n‡j x − y = ?**

K 3 L 2 M N 0 ⬤

1. **x − = 5 n‡j, Gi gvb KZ?**

K 27 L 29 M 21 N 23 ⬤

1. **wb‡Pi †KvbwU ab Gi gvb?**

K (a + b)2(a − b)2 L − −

M (a + b)2 − 2ab N + − ⬤

1. **x − = 3 n‡j, x2 − Gi gvb KZ?**

K 7 L 11 M 3 N 20 ⬤

1. **a2 + b2 mgvb wb‡Pi †KvbwU?**

K (a + b)2 − 2ab L (a + b)2 − 4ab

M (a2 + b2)2 + 2ab N (a + b)(a − b) ⬤

1. **a − = 2 n‡j, a2 + = KZ?**

K 6 L 4 M 2 N 1 ⬤

1. **p = b − 2c, q = a + 3c n‡j, (p + q)2Gi gvb KZ?**

K a2 + 2ab + b2 L b2 − 4bc + c2

M a2 + 6c + 9c2 N a2 + b2 + c2 + 2ab + 2bc + 2ca ⬤

1. **a + b = 11 Ges a − b = 3 n‡j, ab = KZ?**

K 130 L 260 M 28 N 56 ⬤

1. **a2 − b2 = 2, a − b = 1 n‡j, a + b Gi gvb wb‡Pi †KvbwU?**

K 1 L 2 M 3 N 4 ⬤

1. **P + = 4 n‡j, P2 + Gi gvb KZ?**

K 18 L 16 M 14 N 12 ⬤

1. **m + = 2 n‡j m4 + = KZ?**

K 1 L 2 M 3 N 4 ⬤

1. **H− R = 12 Ges HR = 27 n‡j,**

i. (H + R)2 = 36 ii. H2 + R2 = 90

iii. 2H2 + 2R2 = 170

wb‡Pi †KvbwU mwVK?

K i I ii L i I iii M ii I iii N i, ii I iii ⬤

1. **hw` x2 + 2x + 1 = 0 nq, Z‡eÑ**

i. = 2 ii. = – 2

iii. = 0

**wb‡Pi †KvbwU mwVK?**

K i L ii M iii N i, ii I iii ⬤

1. **a + = 2 n‡j-**

i. = 2 ii. a4 − 2a2 + 1 = 0 iii. a2 + = 2

**wb‡Pi †KvbwU mwVK?**

K i I ii L ii I iii M i I iii N i, ii I iii ⬤

1. **a + = 2****n‡j**

i. a2 + = 2 ii. a2 + = a4 + iii. a2 + = a3 +

**wb‡Pi †KvbwU mwVK?**

K i I ii L ii I iii M i I iii N i, ii I iii ⬤

1. **x = 3 + 2****n‡j−**

i. x + = 6 ii. x2 + = 34 iii. x3 + = 150

**wb‡Pi †KvbwU mwVK?**

K i I ii L ii I iii M i I iii N i, ii I iii ⬤

1. **x + = 5 n‡j-**

i. x2 + = 23 ii. − = 21 iii. 2 = 10

**wb‡Pi †KvbwU mwVK?**

K i I ii L i I iii M ii I iii N i, ii I iii ⬤

1. **9x2 + 25y2 Gi mv‡\_ KZ †hvM Ki‡j †hvMdj c~Y©eM© n‡e?**

i. − 30xy ii. 30xy iii. 450xy

**wb‡Pi †KvbwU mwVK?**

K i I ii L i I iii M ii I iii N i, ii I iii ⬤

1. **a − b = 7 Ges ab = 5 n‡j Ñ**

i. (a + b)2 = 69 ii. a2 + b2 = 59 iii. a2 − b2 = 35

**wb‡Pi †KvbwU mwVK?**

K i I ii L i I iii M ii I iii N i, ii I iii ⬤

**wb‡Pi Z\_¨ n‡Z 27 I 28 bs cÖ‡kœi DËi `vI :**

a + b = 6, ab = 8, hLb a > b.

1. **a – b = KZ?**

K 2 L ± 2 M 2 N ± 2 ⬤

1. **a2 – b2 Gi gvb KZ?**

K ± 2 L ± 2 M ± 12 N 12 ⬤

**wb‡Pi DÏxc‡Ki Av‡jv‡K 29 - 31 bs cÖ‡kœi DËi `vI :**

−

1. **Gi gvb wb‡Pi †KvbwU?**

K 36 L 38 M 40 N 42 ⬤

1. **= KZ?**

K 36 L 38 M 40 N 44 ⬤

1. **Gi gvb KZ?**

K 1442 L 1444 M 1446 N 1450 ⬤

⏹ **wb‡Pi Z‡\_¨i Av‡jv‡K 2 Ñ 34 bs cÖ‡kœi DËi `vI :**

a − = 4

1. **a2 + = KZ?**

K 13 L 18 M 20 N 22 ⬤

1. **a + = KZ?**

K 2 L 3 M 4 N 6 ⬤

1. **a2 − = KZ?**

K 16 L 12 M 8 N 4 ⬤

⏹ **wb‡Pi Z‡\_¨i Av‡jv‡K 35 - 37 bs cÖ‡kœi DËi `vI :**

a + b = 5, a − b = 3 n‡j-

1. **a2 + b2** **Gi gvb KZ?**

K 34 L 15 M 16 N 17 ⬤

1. **ab** **Gi gvb KZ?**

K 4 L 8 M 16 N 32 ⬤

1. **a2 − b2** **Gi gvb KZ?**

K 25 L 9 M 15 N 8 ⬤

⏹ **wb‡Pi Z‡\_¨i Av‡jv‡K 38 Ñ 40 bs cÖ‡kœi DËi `vI :**

x + y + z GKwU exRMwYZxq ivwk|

1. **ivwkwUi eM© KZ?**

K x2+y2+z2 L x2+ y2+ z2+ 2xy+ 2yz+2zx

M x2+y2+z2−2xy−2yz − 2zx N x2+y2 +z2−x−y−z⬤

1. **ivwkwUi mv‡\_ (x + y − z) Gi ¸Ydj KZ?**

K x2 + 2xy + y2 L x2+ 2xy + y2− z2

M x2+y2−z2 N x2 − y2 − z2 ⬤

1. **ivwkwUi gvb 5 Ges xy + yz + zx = 10 n‡j,**

**x2 + y2 + z2 = KZ?**

K 25 L 20 M 10 N 5 ⬤