

Calculation का महत्त्व वेंच

Class-2

ADDITION (जोड़)

TYPE-4

2 DIGITS + + + +

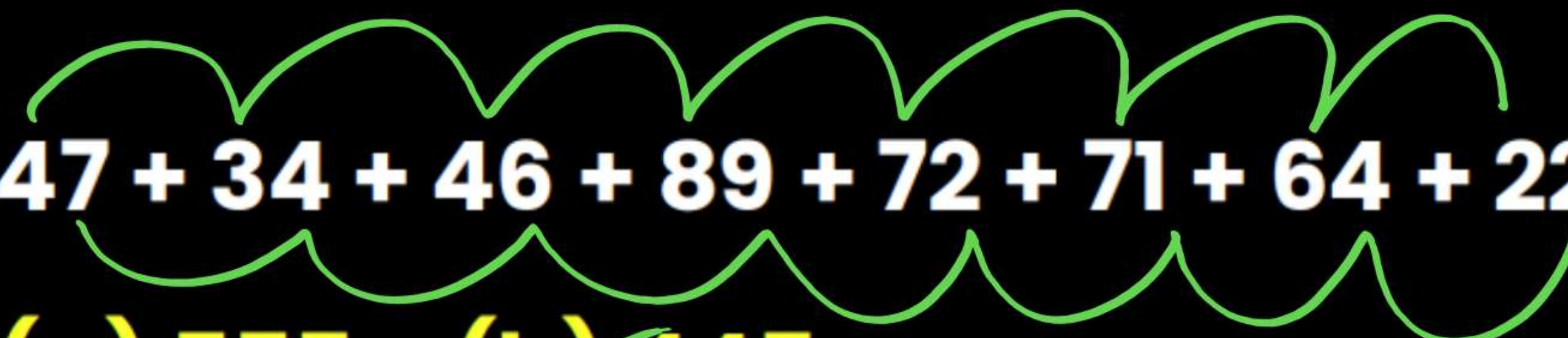
$$\begin{array}{r} 460 \\ 41 \\ \hline 501 \end{array}$$

$$73 + 47 + 58 + 68 + 78 + 97 + 80$$

(a) 573 ☒ (b) 501

(c) 583 (d) 494

(B)


$$47 + 34 + 46 + 89 + 72 + 71 + 64 + 22$$

(a) 555 (b) 445

(c) 345 (d) 465

ⓑ

$$\checkmark 79 + \checkmark 27 + \checkmark 64 + \checkmark 72 + \checkmark 35 + \checkmark 44 + \checkmark 17$$

(a) 333

(b) 348

~~(c) 338~~

(d) 543




$$55 + 86 + 98 + 88 + 75 + 77 + 67 + 25$$

(a) 582 (b) 471

~~(c) 571~~ (d) 661



$$87 + 44 + 99 + 81 + 67 + 94 + 28$$

~~(a)~~ 500 (b) 502

(c) 601 (d) 408

A

$$71 + 85 + 76 + 77 + 77 + 64 + 49 + 57$$

~~(a) 556~~ (b) 776

(c) 666 (d) 456

A

$$84 + 64 + 72 + 49 + 71 + 67 + 94$$

(a) 602 (b) 401

(c) 507 (d) 501

$$68 + 95 + 68 + 76 + 59 + 79 + 88 + 26$$

(a) 764 (b) 481

(c) 679 (d) 559

$$19 + 36 + 45 + 76 + 77 + 64 + 49 + 57$$

(a) 323 (b) 453

(c) 556 (d) 423

$$73 + 98 + 92 + 78 + 43 + 68 + 65 + 97 + 66 + 45$$

(a) 827 (b) 924

(c) 725 (d) 725

$$86 + 87 + 37 + 21 + 43 + 78 + 94 + 43 + 23 + 93 + 69$$

(a) 873 (b) 963

(c) 577 (d) 674

$$34 + 64 + 75 + 95 + 82 + 46 + 64 + 67 + 23 + 99$$

(a) 789 (b) 649

(c) 569 (d) 779

$$74 + 64 + 82 + 47 + 71 + 67 + 94 + 48 + 98$$

(a) 735 (b) 845

(c) 569 (d) 645

$$88 + 43 + 64 + 75 + 71 + 21 + 74 + 24$$

(a) 533 (b) 460

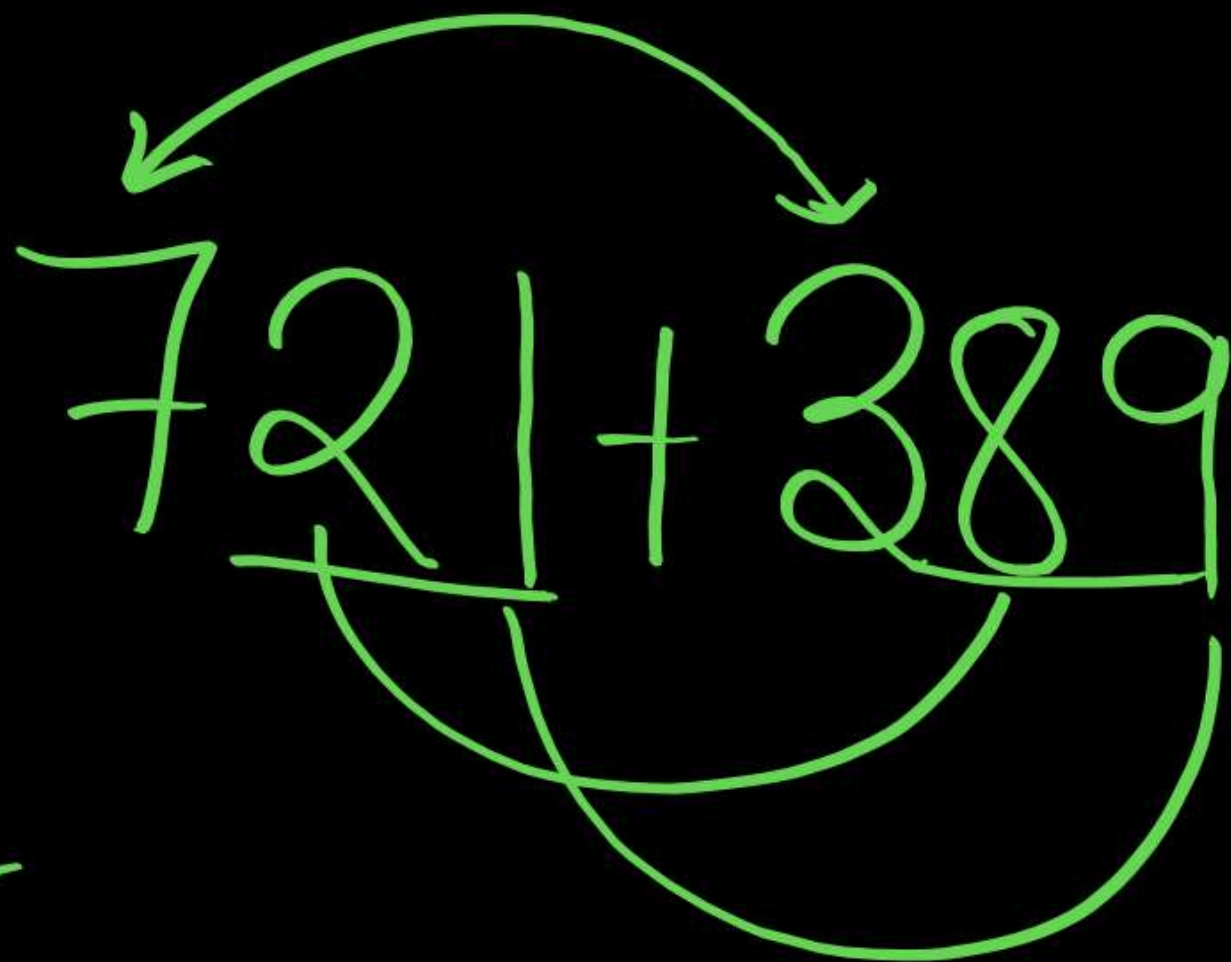
(c) 587 (d) 481

ADDITION (जोड़)

TYPE-5

3digit + 3digit

$$\begin{array}{r} 1000 \\ 1000 \checkmark \\ 10 \checkmark \\ \hline 1110 \end{array}$$

$$721 + 389$$


$$243 + 362$$

$$605$$

512+387

899

$$923 + 604$$

$$1527$$

Pen Joe

mg

789+365

1154

$$412 + 924$$

$$1336$$

$$886 + 788$$

$$1674$$

$$875 + 578$$

1453 ✓

ADDITION (जोड़)

TYPE-6

3digit + + + - - -

✓✓ ✓✓ ✓✓ ✓✓ ✓✓ ✓✓ ✓✓ ✓✓ ✓✓
 $234 + 134 + 425 + 645 + 945 + 854 + 814$

(a) 3106 (b) 3366

✓(c) 4051 (d) 3486

3800
220

©

$$484 + 656 + 758 + 154 + 785 + 121 + 174$$

 ~~(a)~~ 3132 (b) 3433

(c) 3237 (d) 3720

$$252 + 356 + 645 + 784 + 589 + 258 + 144 + 154$$

(a) 3883 (b) 3182

(c) 4434 (d) 3272


$$147 + 548 + 784 + 689 + 369 + 258 + 245 + 121$$

~~(a) 3161~~ (b) 3262

(c) 4271 (d) 4571

$$794 + 884 + 574 + 764 + 554 + 854 + 234$$

(a) 4759 (b) 4257

(c) 4658 (d) 4966

$$449669 + 763 + 7852 + 81 + 134$$

(a) 458499 (b) 428897

(c) 469899 (d) 568899

$$354 + 645 + 958 + 784 + 678 + 245 + 167$$

(a) 3932 (b) 3631

(c) 4833 (d) 3831

$$450 + 466 + 598 + 764 + 795 + 423 + 167$$

(a) 3037 (b) 3764

(c) 3573 (d) 3663

$$653 + 823 + 669 + 789 + 653 + 564 + 233$$

(a) 4485 (b) 4274

(c) 4184 (d) 4384

$$212 + 323 + 914 + 420 + 680 + 741 + 234$$

(a) 2923 (b) 4124

(c) 3525 (d) 3524

$$425 + 645 + 945 + 854 + 814 + 467$$

(a) 4555

(b) 4249

(c) 4350

(d) 4150

Advance Calculation

Chapter-1

$$114^2$$

$$\underline{12996}$$

$$107^2$$

$$\underline{11449}$$

$$96^2$$

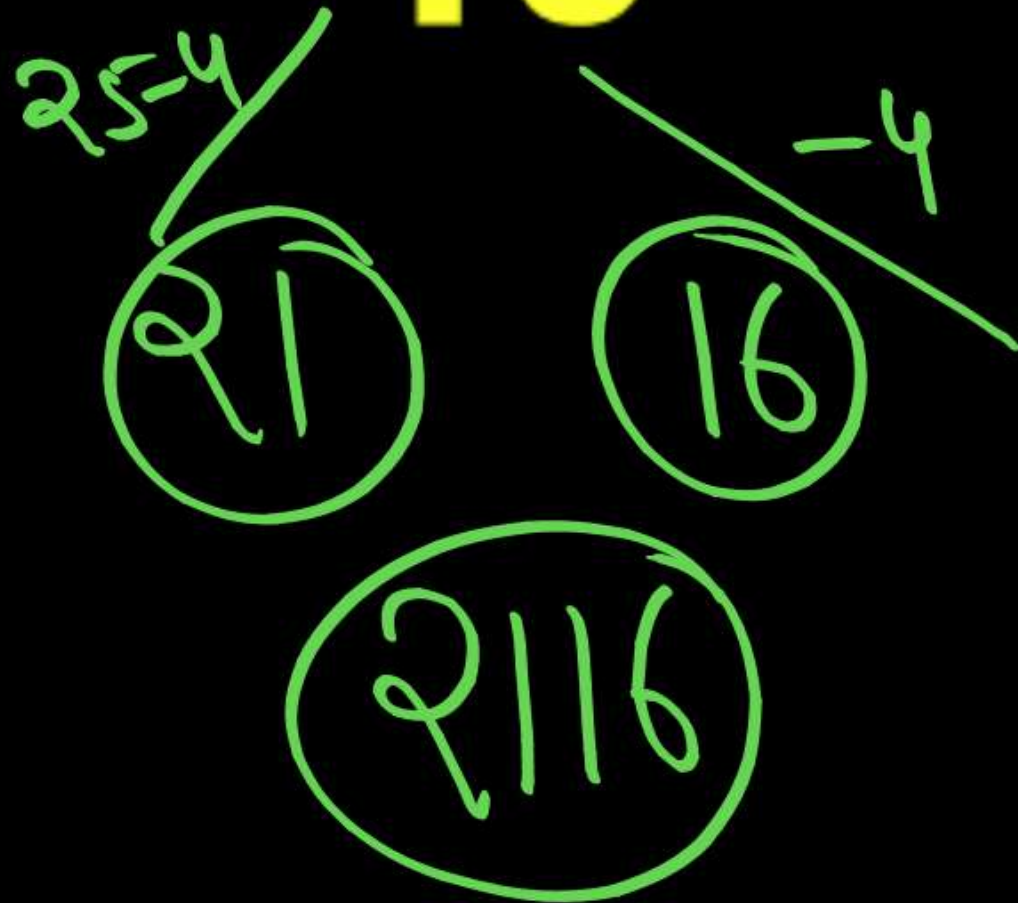
$$9216$$

(4) Base 50 के साथ Square (वर्ग)

$\frac{100}{2} = 50$

- Base 50 के साथ Square (वर्ग)

46²



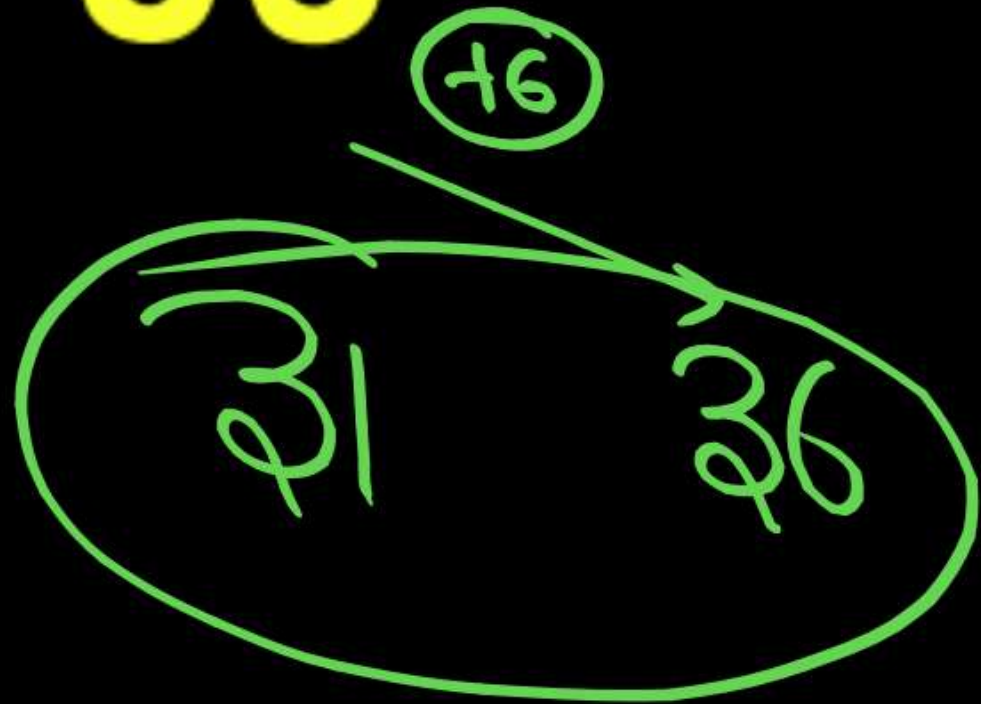
- Base 50 के साथ Square (वर्ग)

38²

38²
14 44

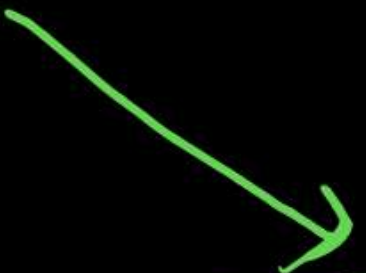
- Base 50 के साथ Square (वर्ग)

56²

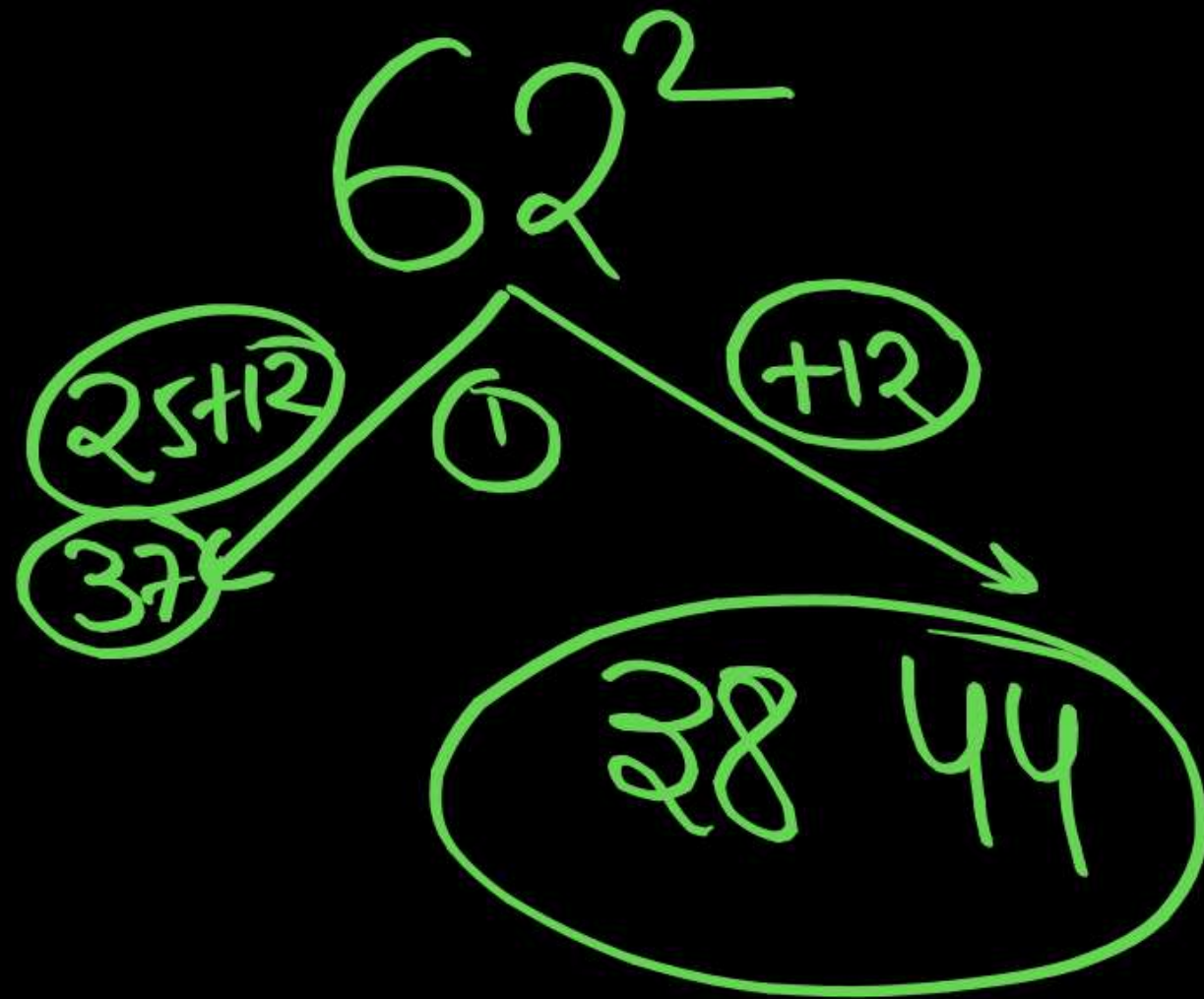


- **Base 50 के साथ Square (वर्ग)**

63²



3969



(5) $99^2, 999^2, 9999^2, \dots$

$$\underline{99}^2 = (99-1)/01 = \underline{9801}$$

$$\underline{999}^2 = (999-1)/001 = \underline{998001}$$

$$9999^2 = (9999-1)/0001 = \underline{99980001}$$

$$99999^2 = (99999-1)/00001 = \underline{9999800001}$$

- $99^2, 999^2, 9999^2, \dots$

$(999)^2$

998001

- $99^2, 999^2, 9999^2, \dots$

$(9999999)^2$

999998000001

(6) Cube (घन) of any number (Universal Method)

$$(ab)^3$$

$$a^3 / 3a^2b / 3ab^2 / b^3$$

— — — —

- Cube (घन) of any number (Universal Method)

42³

$$\begin{array}{r}
 42^3 \xrightarrow{\quad} \\
 a \quad b \quad +10 \quad +4 \\
 a^3 / 3a^2b / 3ab^2 / b^3 \\
 4^3 \quad 3 \times 4^2 \times 2 \quad 3 \times 4 \times 2^2 \quad 2^3 \\
 \downarrow \quad \downarrow \quad \downarrow \\
 \boxed{74 \quad 0 \quad 8 \quad 8}
 \end{array}$$

$$\begin{array}{ccc}
 & 2 & 2^3 \\
 \textcircled{4} & \textcircled{5} & \textcircled{2} \\
 2^3 & 3 \times 2 \times 3 & 3 \times 2 \times 3^2 \rightarrow 3^3
 \end{array}$$

12 1 6 7

$$5 \times 3^3$$

148877

- **Cube (घन) of any number (Universal Method)**
-

56³

56³

Calculation

175616

$$(a+b)^3 = a^3 + b^3 + 3a^2b + 3ab^2$$

$$a^3 / 3a^2b / 3ab^2 / b^3$$

$$72^3$$



$$\underline{373248}$$

1 step में



Strong हो

(7) Decimal Number का Cube (दशमलव संख्या का घन)

3 गुना का रिश्ता

$$(1.6)^3$$

$$16^3$$

↓

$$4.096$$

$$4096$$

$$(2.2)^3$$

10.648 Ans

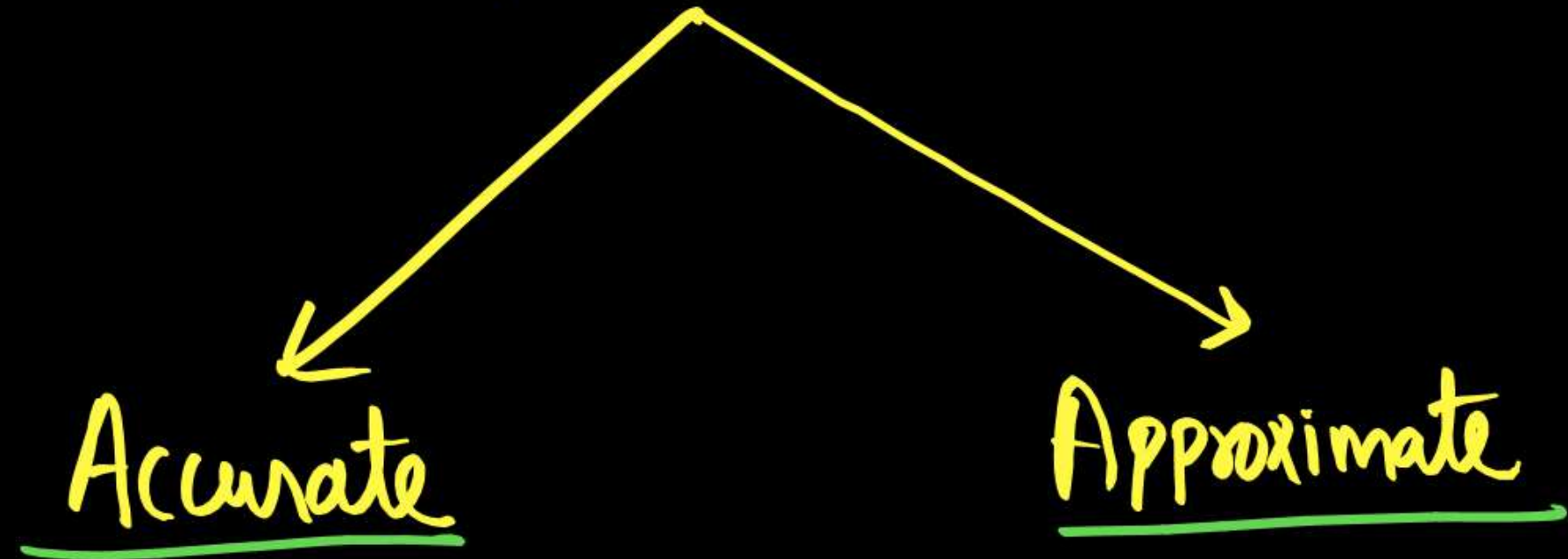
- Decimal Number का Cube (दशमलव संख्या का घन)

$$(3.6)^3$$

- **Decimal Number का Cube (दशमलव संख्या का घन)**
-

$$(4.8)^3$$

Square Root (वर्गमूल)



(8) Accurate Square Root (सटीक वर्गमूल)

Accurate

$$\sqrt{16} = \sqrt{4^2} = 4$$
$$\sqrt{49} = \sqrt{7^2} = 7$$

Approx.

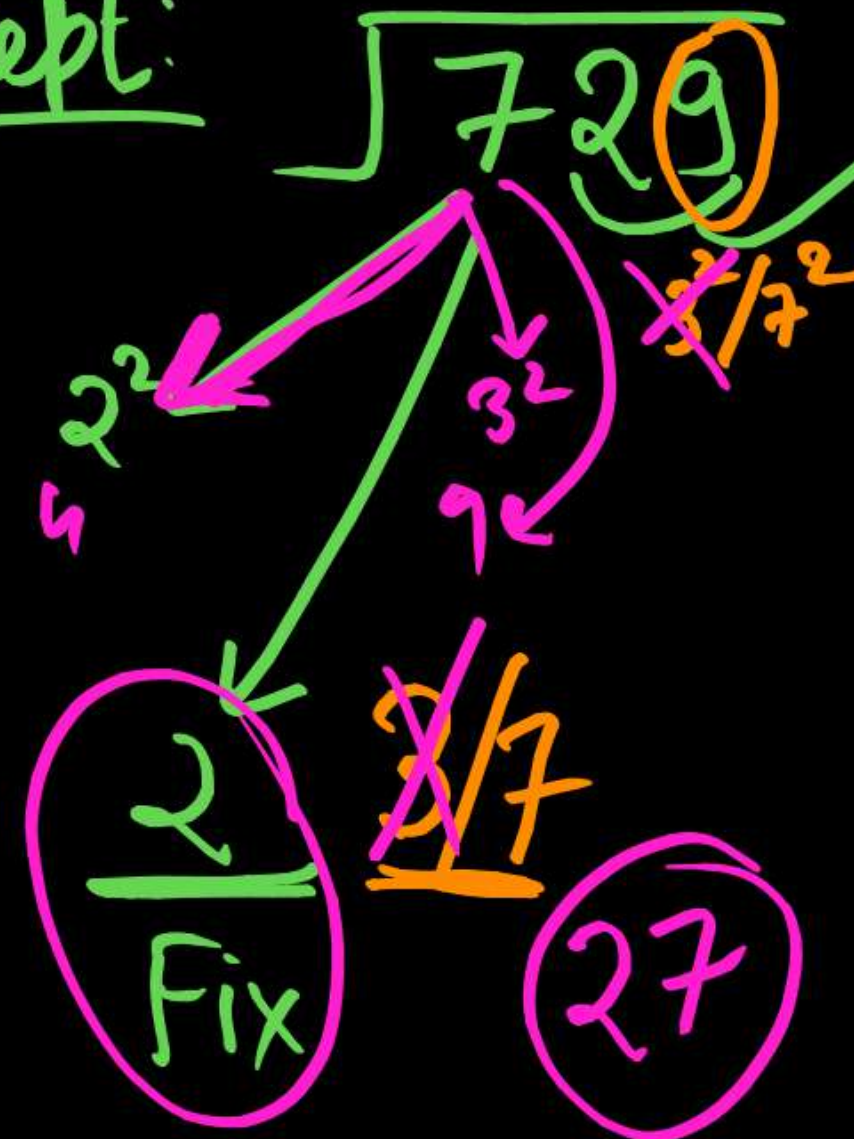
$$\sqrt{5} =$$

• Accurate Square Root (सटीक वर्गमूल)

$$\sqrt{729}$$

- (A) 23
- ✓ (B) 27
- (C) 31
- (D) 17

Concept:



- (1) Last से Pairing 2 Digit
- (2) ऐसी संख्या जिसका Square कभी हुई संख्या से कम या बराबर हो
- (3) Last Digit

- **Accurate Square Root (सटीक वर्गमूल)**

$$\sqrt{576}$$

- Ⓐ 34
- Ⓑ 24
- Ⓒ 26
- Ⓓ 36

Handwritten diagram showing the prime factorization of 576. The number 576 is written under a square root symbol. Arrows point from the 576 to 2^2 and 3^2 , which are then multiplied to get $2^4 \times 3^2$. The final answer 24 is circled.

Ans



Special Property : $x^2, (50+x)^2, (50-x)^2, (100+x)^2$ & $(100-x)^2$ सभी की last 2 digit same होंगी।

✓

	Last two digit
$3^2, 53^2, 47^2, 103^2, 97^2 \longrightarrow$	<u>09</u>
$6^2, 56^2, 44^2, 106^2, 94^2 \longrightarrow$	<u>36</u>
$9^2, 59^2, 41^2, 109^2, 91^2 \longrightarrow$	<u>01</u>
$18^2, 68^2, 32^2, 118^2, 82^2 \longrightarrow$	<u>24</u>

324 ←

$21^2, 71^2, 29^2, 121^2, 79^2 \longrightarrow$ last two digit
4 1

- **Accurate Square Root (सटीक वर्गमूल)**

$$\sqrt{5329}$$

Ⓐ 77

Ⓑ 73

Ⓒ 83

Ⓓ 67

$$\sqrt{5329}$$

Handwritten diagram showing the prime factorization of 5329. The number 5329 is written under a square root symbol. Arrows point from the number to 7^2 and 8^2 . A bracket on the right side of the number points to $3/3$.

73 Ans

• Accurate Square Root (सटीक वर्गमूल)

$$\sqrt{7056}$$

$$\rightarrow 16^2 \rightarrow$$

(A) 86

(B) 76

(C) 74

(D) 84

Ans

2nd Ans हूना
last two digit से

- Accurate Square Root (सटीक वर्गमूल)

$$\sqrt{37249}$$

(A) 193

(B) 203

(C) 187

(D) 183

(A)

देखते ही Ans

- Accurate Square Root (सटीक वर्गमूल)

$$\sqrt{35721}$$

- Ⓐ 181
- Ⓑ 189
- Ⓒ 191
- Ⓓ 199

→ (20-11)

Ⓑ

- Accurate Square Root (सटीक वर्गमूल)

$$\sqrt{243049}$$

(A) 513

(B) 483

(C) 487

~~(D) 493~~

(D)

- Accurate Square Root (सटीक वर्गमूल)

$$\sqrt{398161}$$

(A) 611

(B) 621

(C) 631

(D) 641

(C)

- **Accurate Square Root (सटीक वर्गमूल)**

$$\sqrt{121801}$$

- Ⓐ 341
- Ⓑ 349
- Ⓒ 359
- Ⓓ 369

M.W