

QUANT

Ratio-Based Analysis

$$A = 2$$

$$B = 5$$

$$A:B = 2:5$$

$$4:10$$

$$20:50$$

$$200:500$$

$$2000:50000$$

$$A:B:C = 1:2:3$$

$$A:B = 2:3$$

$$B:C = 4:1$$

$$A:B:C =$$

$$\frac{A}{B} = \frac{2 \times 4}{3 \times 4} = \frac{8}{12}$$

$$\frac{B}{C} = \frac{4 \times 3}{1 \times 3} = \frac{12}{3}$$

$$8:12:3$$

$$3:12:20$$

$$\frac{A}{B} = \frac{1 \times 3}{4 \times 3} = \frac{3}{12}$$

$$\frac{B}{C} = \frac{3 \times 4}{5 \times 4} = \frac{12}{20}$$

Adult problem



$$A:B:C:D:E:F$$

= ??

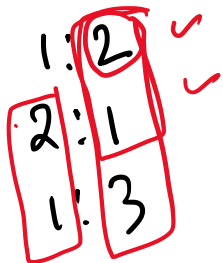
Left all
Right knocks in
Right all ..

- ✓ A:B = 1:2
- ✓ B:C = 2:3
- ✓ C:D = 1:2

$$(1 \cdot 2 \cdot 1) : (2 \cdot 2 \cdot 1) : (2 \cdot 3 \cdot 1) : (2 \cdot 3 \cdot 3)$$

$$= 2 : 4 : 6 : 18$$

$$\begin{array}{l}
 2 : 4 : 6 : 18 \\
 = 1 : 2 : 3 : 9
 \end{array}$$



$$(1.2.1) : (2.2-1) : (2.1.1) \\
 : (2.1.3)$$

$$\begin{array}{l}
 D:E = 1:2 \\
 F:F = 2:1 \\
 F:G = 1:3
 \end{array}$$

$$\Rightarrow 2:4:2:6 \\
 \Rightarrow 1:2:1:3$$

9062395723



$$A:B:C:D:E:F$$

$$(1.2.1) : (3.2.1) : (1.1.3.1.1) \\
 : (1.2.1.1) : (1.2.2.1) : (1.2.1.5)$$

$$\Rightarrow 2:6:3:2:4:20$$

beam day

IFM



Duplicate

Twist day

Tuesday

Entrepreneurship

Ontra

world

woud

code

Duplicate Ratio → Square

$$\frac{4}{5} \rightarrow \frac{16}{25}$$

Triplete Ratio → $\frac{64}{125}$

Quadruplicate Ratio → $\left(\frac{4}{5}\right)^4$

$$\frac{256}{625}$$

$\left(\frac{16}{25}\right)^{\frac{1}{2}}$ → Sub-duplicate → $\left(\frac{4}{5}\right)$
Sub-triplicate → $\left(\frac{64}{125}\right)^{\frac{1}{3}}$

- 1³ = 1 ✓
- 2³ = 8 ✓
- 3³ = 27 ✓
- 4³ = 64 ✓
- 5³ = 125 ✓
- 6³ = 216 ✓
- 7³ = 343 ✓
- 8³ = 512 ✓
- 9³ = 729 ✓
- 10³ = 1000 ✓

17576 → 56³

1296 → 18³

59319 → 39³

636056 → 86³

~~607645423~~

17576 → 26³

521787 → 8³

1-100

59 x 59 x 59

→

941192 3

→ 98 3

3³ = 27

63

3⁴

1 7 1
10 100 ✓

1 1 1 1 1 1 1 1 1 1
5 7 1 7 8 7 → 8 3

h 2
5
2 1/5

1 2 3
5 6
7 8 9
0 + -

1
1
1
1

Reverse Problem

A : B = 6 : 7

7 : 6

1 : 2 : 3 : 4

4 : 3 : 2 : 1

No of Coins → values

20 → 20 → 1
5 → 4
70 → 2
2 → 10

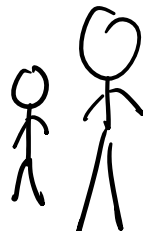
1 : 2 : 4 : 10

3

40 : 100
~~2 : 5~~
2 : 5

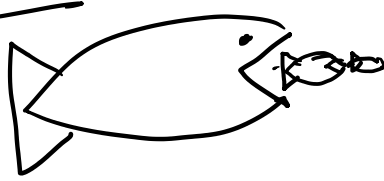
20 : 50 = 2 : 5
21 : 51 = 7 : 17
22 : 52 = 11 : 26
23 : 53

Age Problems



40 : 100

Rating useful here
Self help ①

40:100
 20 50
 40 70 = 4:7


23:53
 24:54
 25:55 = 5:11
 26:56
 27:57 = 9:19
 28:58 = 14:28

50 → 100
 70:100 = 7:10

GF FGM = + F + M + D + S
 → ○

1 + 2 + 3 + ... + 100
 → $\frac{n(n+1)}{2}$
 → $\frac{100 \times 101}{2} = 50 \times 101 = 5050$
 55016


1 + 2 + ... + 2023
 → $\frac{2023 \times 2024}{2}$

(69 + 70 + 71 + ... + 299)

⇒ (1 + 2 + ... + 299) - (1 + 2 + ... + 68)

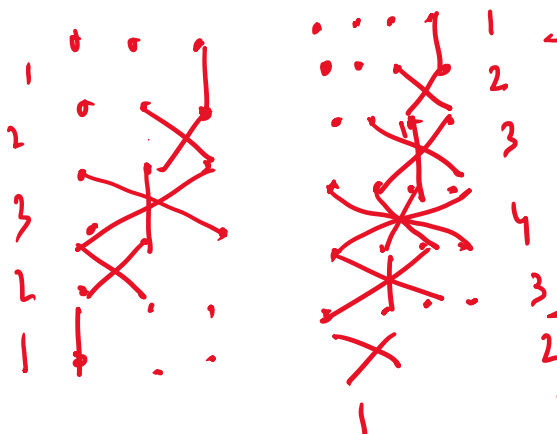
⇒ $\frac{299 \times 300}{2} - \frac{68 \times 69}{2}$

$\frac{3+4+5+6+7}{2} = (1+7) - (1+2)$

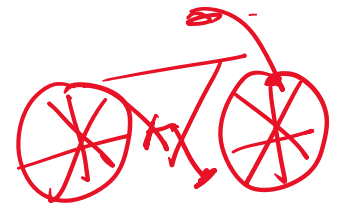
17
 25
 H.  Klunchi
 Hov to m Smbi Bonyaris?
kluch-yaris ⑤

35
 69
 2346

25
~~25~~
 39
 29 ✓
 68
 299
 150
 2
 69
 43
 7



56 BK
 L593
 2 PK 3 MN
 8837261
 983543
 18
 1
 X
 1



①
 ①
 80
 90
 25.30
 170 + 4 - 1
 = 173
 79
 94

33 ✓
 49 ✓
 82
 82

67 345
 19 378
 78
 5
 3

~~B~~ ~~X~~ ~~X~~ C