5 JUNE

Monday

2017

2) 8.5×4.1

Forget about the decimal point

$$\begin{array}{r} 85 \\ \times\ 41 \\ \hline (8\times4)\ (1\times8\ \ (1\times5) \\ \quad +\ 4\times5) \\ 32 \mid 28 \mid 5 \end{array}$$

6

Tuesday

$\doteq$ ~~34.85~~

$= 34.85$

JUNE 11

Sunday

2017

TRIGONOMETRY

Left hand.

90 60 45 30 0

$\sin\theta = \frac{\sqrt{\text{Fingers below}}}{2}$

$\cos\theta = \frac{\sqrt{\text{Fingers above}}}{2}$

$\tan\theta = \frac{\sqrt{\text{Fingers below}}}{\sqrt{\text{Fingers above}}}$

12

Monday

: You can use these formulas to find out the different values.

MAY 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
-	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	-	-	-

JUL 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
-	-	-	-	-	-	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	-	-	-	-	-

13 JUNE

Tuesday

2017

Alternative method.

	0	30	45	60	90
sin θ	$\sqrt{\frac{0}{4}}=0$	$\sqrt{\frac{1}{4}}=\frac{1}{2}$	$\sqrt{\frac{2}{4}}=\frac{1}{\sqrt{2}}$	$\sqrt{\frac{3}{4}}=\frac{\sqrt{3}}{2}$	$\sqrt{\frac{4}{4}}=1$
cos θ	1	$\sqrt{3}/2$	$1/\sqrt{2}$	$1/2$	0
tan θ = sin θ / cos θ	0	$1/\sqrt{3}$	1	$\sqrt{3}$	Not defined
cosec θ = 1/sin θ	Not defined	2	$\sqrt{2}$	$2/\sqrt{3}$	1
sec θ = 1/cos θ	1	$2/\sqrt{3}$	$\sqrt{2}$	2	Not defined
cot θ = 1/tan θ	Not defined	$\sqrt{3}$	1	$1/\sqrt{3}$	0

14

Wednesday

JUNE 15

Thursday

2017

How to draw this table:

1) In the row of sin θ, write 0, 1, 2, 3, 4.
- Divide by 4.
- Take the square root.
- Thus you will get the value for sin θ.

2) In the row of cos θ, write in the reverse order.

16

Friday

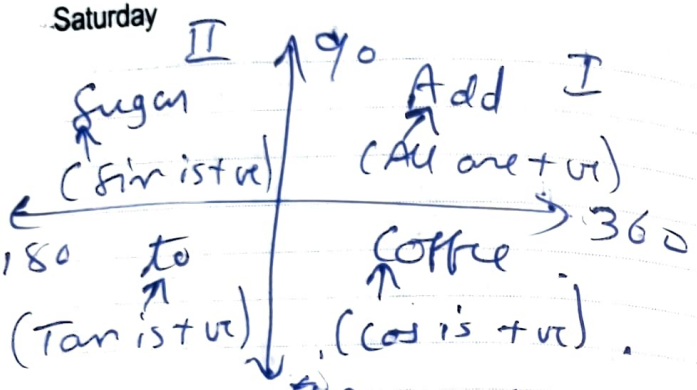
3) Then, as per the formulae, find out the value for tan θ, cosec θ, sec θ and cot θ.

4) Remember, when the denominator is zero, then that value is Not Defined.

17 JUNE

Saturday

2017



18 Sunday

In the Ist quadrant, All are positive.

In the II Quadrant, only Sino is +ve.

In the III Quadrant, only Tano is +ve

In the IV Quadrant, only Cos θ is +ve.

JUNE 19

Monday

2017

RULE 1: Add Sugar to Coffee

(+ve / -ve sign)

RULE 2: 180/360 - Horizontal line.

(So no change in Sino, Coso, Tano, ...)

90/270 - Vertical line. 20 Tuesday

(So, there will be a change in Sino, Coso, Tano, ...)

Sino ⇄ Coso.

Seco ⇄ Coseco

tano ⇄ Cot θ.

Examply :

1) $\sin 120^\circ$

~~[illegible]~~

Also,

$\sin(180-60)$

It lies in Quadrant II.

- As per Rule 1, Value is $+\sqrt{}$.
- As per Rule 2, No change for sin to Cos because there is 180° used in the equation.

So, answer is : $\sin 60$

$= +\sqrt{3}/2$.

2) $\tan 330^\circ$

$= \tan(360-30)$.

It lies in IV Quadrant.

As per Rule 1, value is $-\sqrt{}$.

As per Rule 2, No change for tan to Cot

- you have to discard 360°.

$= \tan(-30)$

$= -\tan\theta$.

$= -\frac{1}{\sqrt{3}}$.

3) $\cos 750$

$= \cos(750/360)$

$= \cos(360\times 2+30)$

$360\overline{)750}\ (2$
720
30

It lies in I Quadrant.

25 JUNE

Sunday

2017

As per Rule 1, Value is +ve

As per Rule 2, No change from Cos to Sin.

So, Answer is: $\cos 30$

$= +\sqrt{3}/2$.

26

Monday

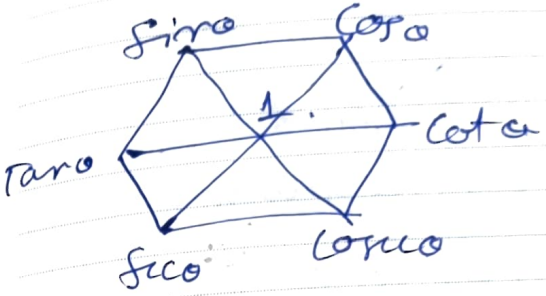
For Calculation purpose, you have to discard (360×2)

27 JUNE

Tuesday

2017

Hexagonal Method of trigonometry



28

Wednesday

Now, look at the diagonals.

1) $\sin\theta = 1/\operatorname{cosec}\theta$

$\operatorname{cosec}\theta = 1/\sin\theta$.

2) $\cos\theta = 1/\sec\theta$

$\sec\theta = 1/\cos\theta$.

3) $\tan\theta = 1/\cot\theta$

$\cot\theta = 1/\tan\theta$.

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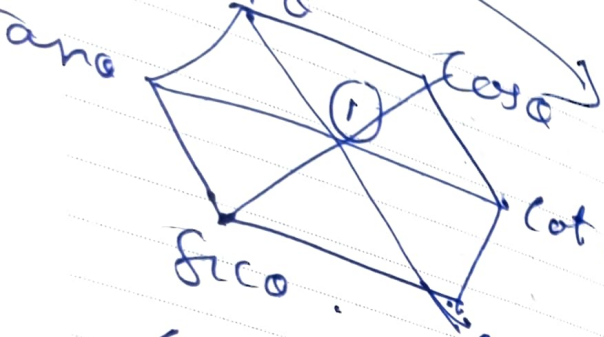


2017

Cosmic clockwise direction

sinθ = cosθ / cotθ .

cosθ = cotθ / cosecθ .

cotθ = cosecθ / secθ .

cosecθ = secθ / tanθ .

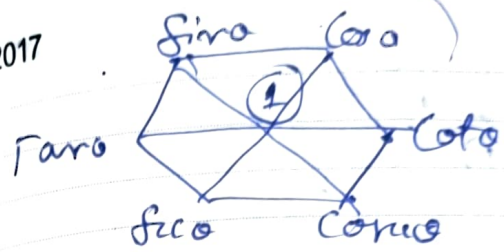
secθ = tanθ / sinθ .

tanθ = sinθ / cosθ .

30
Friday

2017

JULY 1
Saturday



Cosmic Anti-clockwise direction

sinθ = tanθ / secθ .

tanθ = secθ / cosecθ .

secθ = cosecθ / cotθ .

2
Sunday

cosecθ = cotθ / cosθ .

cotθ = cosθ / sinθ .

cosθ = sinθ / tanθ