

Forum:[Hack Forums](#)

Thread: [Trigonometric Function Calculator](#)

Cynn - November 4, 2014, 9:18 pm

Alright everyone...I managed to run into a logic error while trying to make a basic Trigonometric calculator...I'm honestly confused and curious to why this is happening.

I'm fairly new to trig and thought I'd toy around with it a bit
(I know VB.Net Isn't the best language for math ?)

Heres the code:

PHP Code

<?php

Public Class Form1

Dim x, y, r, cos, cot, csc, sec, sin, tan As Double

Private Sub btnCalc_Click(sender As Object, e As EventArgs) Handles btnCalc.Click

x = Double.Parse(txt_X_value.Text)

y = Double.Parse(txt_Y_value.Text)

r = Math.Sqrt((x ^ 2) + (y ^ 2))

cos = x / r

cot = x / y

csc = r / y

sec = r / x

sin = y / r

tan = y / x

lb_cos.Text = cos.ToString

lb_cot.Text = cos.ToString

lb_csc.Text = csc.ToString

lb_r.Text = r.ToString

lb_sec.Text = sec.ToString

lb_sin.Text = sin.ToString

lb_tan.Text = sin.ToString

End Sub

Private Sub btnClear_Click(sender As Object, e As EventArgs) Handles btnClear.Click

'Clear Current Values Button

txt_X_value.Text = "0"

txt_Y_value.Text = "0"

lb_r.Text = "0"

lb_cos.Text = "0"

lb_cot.Text = "0"

lb_csc.Text = "0"

lb_sec.Text = "0"

lb_sin.Text = "0"

lb_tan.Text = "0"

End Sub

End Class

and here's a screenshot: Spoiler ([Click to View](#))

The error can be seen in the screenshot where the label says "tan ? = 0.110431526074847"
The tangent should by no means be 0.110431526074847, It should be 9.
If you have any advice (Other than "Don't do math in Vb.Net") I'd love to hear it.

Malware? - November 4, 2014, 9:24 pm

Your problem is when you set the value equal to like x / y , it should be y / x .

Math error, not programming!

Cynn - November 4, 2014, 9:34 pm

(Nov 4, 2014 10:24 PM)Venomous Net Wrote: [\[CITE\]](#) Your problem is when you set the value equal to like x / y , it should be y / x .

Math error, not programming!

Oh thanks man...Damn. As I said Im new to trig ?

Its still quite strange that when I'm using test data I'm comming up with and incorrect awnser (My test data is also being tested on my TI-83 Plus)
for example: tan ? should have equal 9

Malware? - November 4, 2014, 10:15 pm

(Nov 4, 2014 10:34 PM)Cynic. Wrote: [\[CITE\]](#) Oh thanks man...Damn. As I said Im new to trig ?

Its still quite strange that when I'm using test data I'm comming up with and incorrect awnser (My test data is also being tested on my TI-83 Plus)
for example: tan ? should have equal 9

Make sure you are in degrees and the function is correct!

Hawk HF - November 5, 2014, 2:33 pm

Meh.

Code `lb_tan.Text = sin.ToString`
Could be this.

Cynn - November 5, 2014, 3:13 pm

(Nov 5, 2014 03:33 PM)Hawk HF Wrote: [\[CITE\]](#) Meh.

Code `lb_tan.Text = sin.ToString`

Could be this.Holy shit ? thanks...I honestly wouldnt have caught this...damn. I feel really dumb now ?

SaketSaket - November 5, 2014, 11:16 pm

@OP why you are individually setting each label's value to 0...

Try something like this...

PHP Code

```
<?php
```

```
For Each ctl As Control In Me.Controls  
If TypeOf ctl Is Label Then  
Dim lbl As Label = DirectCast(ctl, Label)  
lbl.Text = ""  
End If  
Next ctl
```

Regards

Saket

Cynn - November 6, 2014, 5:17 am

(Nov 6, 2014 12:16 AM)SaketSaket Wrote: [\[CITE\]](#) @OP why you are individually setting each label's value to 0...

Try something like this...

PHP Code

```
<?php
```

```
For Each ctl As Control In Me.Controls  
If TypeOf ctl Is Label Then  
Dim lbl As Label = DirectCast(ctl, Label)  
lbl.Text = ""  
End If  
Next ctl
```

Regards

SaketI didn't realize you could do something like that...that's actually really awesome o.o thanks man ?