| Visual Basic | Name - |
| :--- | :--- |
| Tracing Code Worksheet \#2 | Period - |

Trace the following code segments and show the output. If an error occurs, print "error". Be sure to follow the order of operations.

```
1 .
Const PRICE_PER_DONUT As Double = 0.50 numDonuts totalCost
Const DISCOUNT A
Dim numDonuts As Integer = 0
Dim totalCost As Double = 0
numDonuts = 5
totalCost = numDonuts * PRICE PER DONUT - DISCOUNT
lblTotalCost.Text = "$" + Str(totalCost)
```

The output that shows up in the label named lblTotalCost. Text is: $\qquad$
2. Assume that the value 10 is typed into the textbox named txtNumBooks

```
Const PRICE_PER_BOOK As Double = 8.00 numBooks totalCost
Const SHIPPING As Double = 3.00
Dim numBooks As Integer = 0
Dim totalCost As Double = 0
numBooks = Val(txtNumBooks.Text)
totalCost = numBooks * PRICE PER BOOK + SHIPPING * numBooks
lblTotalCost.Text = "$" + Str(totalCost)
```

The output that shows up in the label named lblTotalCost.Text is: $\qquad$
3. Assume that the value 18 is typed into the textbox named txtQuizGrade

```
Const CURVE As Integer = 5
numPoints
totalPoints
Dim numPoints As Integer = 0
Dim totalPoints As Integer = 0
numPoints = Val(txtQuizGrade.Text)
totalPoints = numPoints + CURVE
lblTotalPoints.Text = Str(totalPoints)
```

The output that shows up in the label named lblTotalPoints.Text is: $\qquad$
4.

Dim appleSubtotal As Integer $=14 \quad$ grandTotal
Dim bananaSubtotal As Integer $=8$
Dim cherrySubtotal As Integer $=6$
Dim grandTotal As Double $=0$
grandTotal $=$ appleSubtotal + bananaSubtotal + cherrySubtotal / 2
lblGrandTotal.Text $=$ "The total is " + Str(grandTotal)

The output that shows up in the label named lblGrandTotal. Text is: $\qquad$
5.

Const HIT_DAMAGE As Integer $=10$ playerHealth numHits
Dim playerHealth As Integer $=25$
Dim numHits As Integer $=3$
playerHealth $=$ playerHealth - numHits * HIT_DAMAGE
lblHealth.Text $=$ "health $="+$ Str (playerHealth)
The output that shows up in the label named lblHealth. Text is: $\qquad$
6. Assume that the value $\mathbf{2}$ is typed into the textbox named txtTweets

```
Const MAX_CHARACTERS_PER_TWEET As Integer = 140 numTweets totalWords
Const CHARACTERS_PER_WORD As Integer = 5
Dim numTweets As Integer = 0
Dim totalWords As Integer = 0
numTweets = Val(txtTweets.Text)
totalWords = MAX_CHARACTERS_PER_TWEET * numTweets / CHARACTERS_PER_WORD
lblNumWords.Text = "number of words = " + Str(totalWords)
```

The output that shows up in the label named lblNumWords. Text is: $\qquad$
7. Redo Exercise \#6 above assuming that the value 10 is typed into the textbox named txtTweets.

```
numTweets totalWords
```

The output that shows up in the label named lblNumWords. Text is: $\qquad$
8.

```
Const TOTAL_POINTS_POSSIBLE As Integer = 10 totalPoints numStudents average
Dim student\overline{1}Grade A
Dim student2Grade As Integer = 8
Dim student3Grade As Integer = 10
Dim totalPoints As Integer = 0
Dim numStudents As Integer = 3
Dim average As Double = 0
totalPoints = student1Grade + student2Grade + student3Grade
average = totalPoints / numStudents / TOTAL_POINTS_POSSIBLE
lblAverageScore.Text = Str(average)
```

The output that shows up in the label named lblAverageScore. Text is: $\qquad$
9.

Const INTEREST_RATE As Double $=0.05 \quad$ bankBalance $\quad \underline{\text { interestEarned }}$
Dim bankBalance As Double $=100$
Dim numYears As Integer $=8$
Dim interestEarned As Double $=0$
interestEarned = bankBalance * INTEREST_RATE * numYears
lblinterest.Text $=$ "You earned $\$ "+\operatorname{Str}$ (interestEarned)
The output that shows up in the label named lblinterest. Text is: $\qquad$

