

Circles R Us - Making Your Own Excel Formula

1. Start with your spreadsheet looking like this:

	A	B
1	Circles R Us	
2		
3	Radius:	7
4		
5	2 Dimensions	
6	Diameter	
7	Circumference	
8	Area	
9		
10	3 Dimensions	
11	Surface Area	
12	Volume	
13		

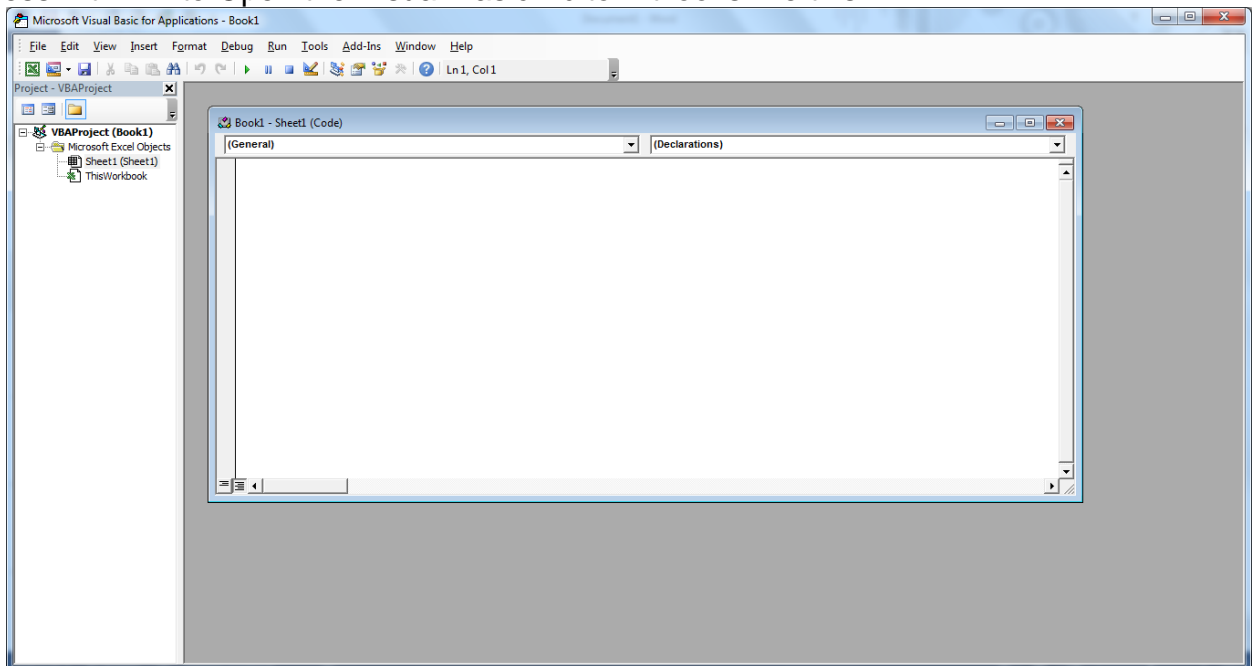
Side Note: We will be making this:

	A	B
1	Circles R Us	
2		
3	Radius:	7
4		
5	2 Dimensions	
6	Diameter	14
7	Circumference	43.9823
8	Area	153.938
9		
10	3 Dimensions	
11	Surface Area	615.7522
12	Volume	1436.755
13		

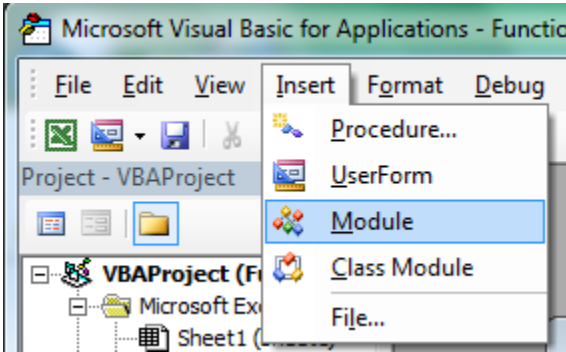
Repeat: Do NOT put in formulas.

Do NOT put in formulas.

2. Press Alt+F11 to Open the Visual Basic Editor. It looks like this:



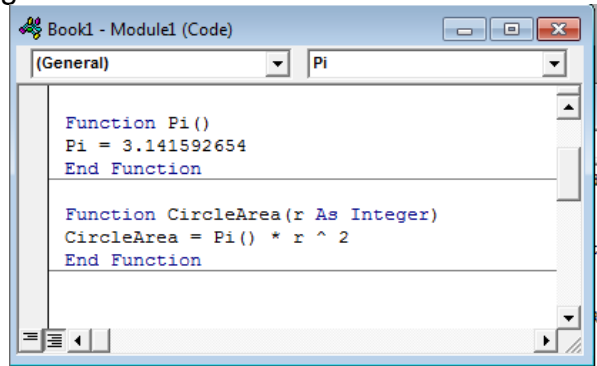
3. Choose to insert a module:



4. Inside the Module, cut and paste in the following:

```
Function Pi()
Pi = 3.141592654
End Function
```

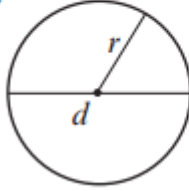
```
Function CircleArea(r As Integer)
CircleArea = Pi() * r ^ 2
End Function
```

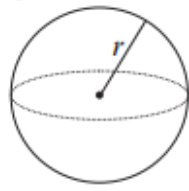


5. Go back to the spreadsheet to test it. Type in your new formula:

	A	B	C	D
1	Circles R Us			
2				
3	Radius:	7		
4				
5	2 Dimensions			
6	Diameter			
7	Circumference			
8	Area	=CircleArea(B3)		
9				
10	3 Dimensions			
11	Surface Area			
12	Volume			
13				

6. Go back to the Visual Basic Editor and make functions for the other 4 spaces.

Geometric Figure	Perimeter	Area
Circle 	$C = \pi d$ or $C = 2\pi r$	$A = \pi r^2$

Geometric Figure	Surface Area	Volume
Sphere 	$A = 4\pi r^2$	$V = \frac{4}{3}\pi r^3$ or $V = \frac{4\pi r^3}{3}$

7. Add your new formulas to the spreadsheet.

B12 : =SphereV(B3)

	A	B	C	D
1	Circles R Us			
2				
3	Radius:	7		
4				
5	2 Dimensions			
6	Diameter	14		
7	Circumference	43.9823		
8	Area	153.938		
9				
10	3 Dimensions			
11	Surface Area	615.7522		
12	Volume	1436.755		
13				

8. When you save, you must use a “Excel Macro-Enabled Workbook” – which is not the default type. Make sure you select it.

