

# Create Multiple Graphs Through Arduino Uno Code

<https://www.youtube.com/watch?v=MB0ZJV25-SU&t=7s>

```
// Formule:-  
//  $y(t) = A \sin(\omega t + p)$   
// Where; A = amplitude, W = angular frequency, t = Time, p = Phase angle  
  
int y1=11;  
int y2=10;  
int y3=9;  
  
void setup() {  
  Serial.begin(9600);  
  pinMode(y1, OUTPUT);  
  pinMode(y2, OUTPUT);  
  pinMode(y3, OUTPUT);  
}  
  
void loop() {  
  // For Different Sine wave Graphs  
  for (int t=0; t<360; t++){  
    float y1= 1*sin((PI/180*t)+0);  
    float y2= 3*sin((2*PI/180*t)+45);  
    float y3= 6*sin((5*PI/180*t)+180);  
  
    // For 50Hz Sine wave Graph  
    //for (int t=0; t<20; t++){  
    //float y1= 3*sin((50*t)+0);  
  
    // See Multiple Grapg Output on Pins  
    pinMode(11, OUTPUT);  
    pinMode(10, OUTPUT);  
    pinMode(9, OUTPUT);  
  
    // See Multiple Grapg on Serial Plotter  
    Serial.print(y1);  
    Serial.print(" ");  
    Serial.print(y2);  
    Serial.print(" ");  
    Serial.print(y3);  
    Serial.println(" ");  
  }  
}  
//End code
```