```
//Dec 2011
//reibot.org

void setup(){
  Serial.begin(9600);
}

void loop(){

  VacRead(0); //returns the voltage on the Vac

  Serial.print("Vac is: ");
  Serial.println(VacRead(0));
  delay(1000);

}


double VacRead(int analogPin){

  double voltageIn = 5*(double)analogRead(analogPin)/1023; //voltageIn is Vout on the equation

  //Serial.print("voltageIn is");
  //Serial.print(voltageIn);

  double Vac = 11*voltageIn - 25;

  //Serial.print("  Vac is");
  //Serial.println(Vac);

  return Vac;
}
```