

```
import math
from graphics import*

def square(x):
    return x*x

def distance(p1,p2):
    dist=math.sqrt(square(p2.getX()-p1.getX())+square(p2.getY()-p1.getY()))
    return dist

def triArea(a,b,c):
    s=(a+b+c)/2.0
    return math.sqrt(s*(s-a)*(s-b)*(s-c))

def main():
    win=GraphWin("Draw a Triangle")
    win.setCoords(0.0,0.0,10.0,10.0)
    message=Text(Point(5,0.5), "Click on three points")
    message.draw(win)

    p1=win.getMouse()
    p1.draw(win)
    p2=win.getMouse()
    p2.draw(win)
    p3=win.getMouse()
    p3.draw(win)

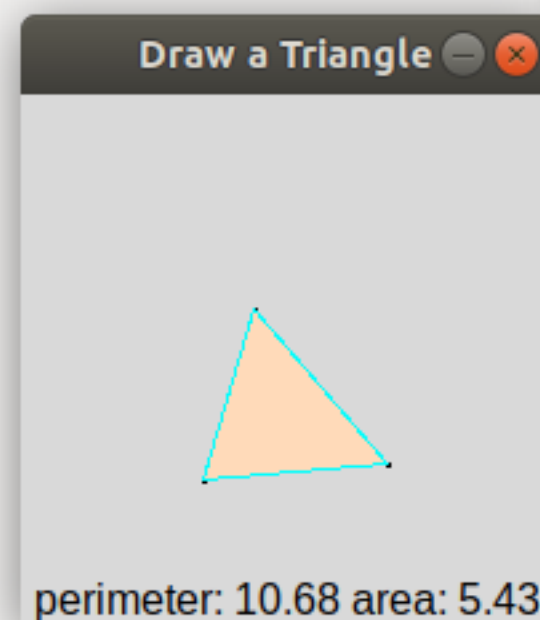
    triangle=Polygon(p1,p2,p3)
    triangle.setFill("peachpuff")
    triangle.setOutline("cyan")
    triangle.draw(win)

    d1=distance(p1,p2)
    d2=distance(p2,p3)
    d3=distance(p3,p1)

    #perim=distance(p1,p2)+distance(p2,p3)+distance(p3,p1)
    message.setText("perimeter: %0.2f area: %0.2f"
                    %((d1+d2+d3),triArea(d1,d2,d3)))

    win.getMouse()
    win.close()

main()
```



```
dan@dan-Alienware-m15:~/Documents/School/CIS110/Excercises/Ch6$ python3 Ch6ex06\ .py
```