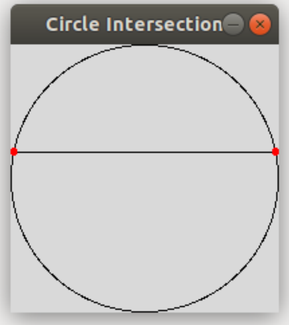
dan@dan-Alienware-m15: ~/Documents/School/CIS110/Excercises/Ch4

File Edit View Search Terminal Help

```
dan@dan-Alienware-m15:~$ cd Documents/School/CIS110/Projects/Wk4/
dan@dan-Alienware-m15:~/Documents/School/CIS110/Projects/Wk4$ python3 dominguez_program4.py
This program creates an American Flag using graphics.py

Daniel Dominguez
CIS110 Program 1
Tue Jun 11 18:50:03 2019
dan@dan-Alienware-m15:~/Documents/School/CIS110/Projects/Wk4$ cd ..
dan@dan-Alienware-m15:~/Documents/School/CIS110/Projects$ ls
dominguez_Program3.zip  template.py  Wk1  Wk2  Wk3  Wk4
dan@dan-Alienware-m15:~/Documents/School/CIS110/Projects$ cd .
dan@dan-Alienware-m15:~/Documents/School/CIS110/Projects$ cd ..
dan@dan-Alienware-m15:~/Documents/School/CIS110$ cd Excercises/
dan@dan-Alienware-m15:~/Documents/School/CIS110/Excercises$ ls
Ch1  Ch2  Ch3  Ch4  Templates
dan@dan-Alienware-m15:~/Documents/School/CIS110/Excercises$ cd Ch4
dan@dan-Alienware-m15:~/Documents/School/CIS110/Excercises/Ch4$ ls
Ch4ex01.py   Ch4ex05.pdf  Ch4ex07.py   Ch4ex09.pdf           graphics.py
Ch4ex02.pdf  Ch4ex05.py   Ch4ex08.pdf  Ch4ex09.py            graphics.pyc
Ch4ex02.py   Ch4ex07.pdf  Ch4ex08.py   dominguez_program4.py  __pycache__
dan@dan-Alienware-m15:~/Documents/School/CIS110/Excercises/Ch4$ python3 Ch4ex07.py
This program computes the intersection
of a circle and a borizontal line

Enter the radius of the circle: 2
Enter the y-inctercept of the line: 3
Traceback (most recent call last):
  File "Ch4ex07.py", line 31, in <module>
    main()
  File "Ch4ex07.py", line 18, in main
    x=math.sqrt(r*r-yi*yi)
ValueError: math domain error
dan@dan-Alienware-m15:~/Documents/School/CIS110/Excercises/Ch4$ python3 Ch4ex07.py
This program computes the intersection
of a circle and a borizontal line

Enter the radius of the circle: 10
Enter the y-inctercept of the line: 2
x values of intersection are -9.797958971132712 9.797958971132712
```

Open Ch4ex07.py ~/Documents/School/CIS110/Excercises/Ch4 Save

```
from graphics import*
import math

def main():
        print("This program computes the intersection")
        print("of a circle and a borizontal line")
        print("")

        r=float(input("Enter the radius of the circle: "))
        yi=float(input("Enter the y-inctercept of the line: "))

        win=GraphWin("Circle Intersection")
        win.setCoords(-10,-10,10,10)

        Circle(Point(0,0),r).draw(win)
        Line(Point(-10,yi),Point(10,yi)).draw(win)

        x=math.sqrt(r*r-yi*yi)
        print("x values of intersection are", -x,x)

        p1=Circle(Point(x,yi),0.25)
        p1.setOutline('red')
        p1.setFill('red')
        p1.draw(win)

        p2=p1.clone()
        p2.move(-2*x,0)
        p2.draw(win)

        win.getMouse()
main()
```



Python Tab Width: 8 Ln 20, Col 9 INS