

Answers to Lesson 9: Functions Practice Problems

(Included as a repl assignment in GWC PDX Class)

Question 1: Absolute Values!

```
def absolute_value(num):  
    """This function returns the absolute  
    value of the entered number"""  
  
    if num >= 0:  
        num = num  
    else:  
        num = num * -1  
  
    return num
```

Question 2: Largest of two numbers

```
def max_of_two( x, y ):  
    if x > y:  
        return x  
    else:  
        return y  
  
def max_of_three( x, y, z ):  
    max_XY = max_of_two( x , y )  
    max_XYZ = max_of_two( max_XY, z )  
    return max_XYZ
```

Question 3: Get Unique Numbers

```
def unique_list(l):  
    x = []  
    for a in l:  
        if a not in x:  
            x.append(a)  
    return x
```

Question 4: Tic-Tac-Toe

```
import sys

player1 = input("What's your name, Player 1?")
player2 = input("And your name, Player 2?")

player1_answer = input("%s, do you want to choose rock, paper or scissors?" % player1)
player2_answer = input("%s, do you want to choose rock, paper or scissors?" % player2)

def compare(u1, u2):
    if u1 == u2:
        return("It's a tie!")
    elif u1 == 'rock':
        if u2 == 'scissors':
            return("Rock wins!")
        else:
            return("Paper wins!")
    elif u1 == 'scissors':
        if u2 == 'paper':
            return("Scissors win!")
        else:
            return("Rock wins!")
    elif u1 == 'paper':
        if u2 == 'rock':
            return("Paper wins!")
        else:
            return("Scissors win!")
    else:
        return("Invalid input! You have not entered rock, paper or scissors, try again")
    sys.exit()
```

