Python Exercise 3

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January 13, 2021

1 Instructions

Finish the following exercises on a piece of paper and scan a PDF file by 20:59 PM CST, Jan 13. The exercise takes no more than **30** minutes in total. Record the time it takes to finish, and write it down at the end of your answers.

2 Class Recap

In today's lesson, we went over Turtle and functions.

3 Exercise

3.1 Functions

1. What syntax errors do the following lines of codes have?

```python
def draw_triangle()
turtle.forward(100)
# code here
```

2. Describe what the following function does.

```python
import turtle
turtle = turtle.Turtle()
def func(length, color, x, y):
    turtle.setposition(x, y)
    turtle.color(color)
    turtle.forward(length)
    turtle.left(90)
    turtle.forward(length)
    turtle.right(45)
    import math
    turtle.backward(length * math.sqrt(2))
```

3.2 Turtle

1. What function do we use to get the heading of a turtle instance?

2. Write down the code that draws a normal triangle of length 100.

3. Draw **three** geometric shapes with Turtle on your own. Attach the screenshot with your answer as well. Be creative.