

COMP10001 - Sem 2 2024 - Week 2

Foundations of Computing



Daksh Agrawal

Meet your Tutor

Daksh Agrawal (he/him)

Bachelor of Science (Data Science)

Year 3

Loves: Table Tennis, Programming

Hates: Waking up Early

Future: Make Crazy Money

Why Data Science? Best way to understand
the world (and good money :P)

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Meet your Peers

Name

Semester, Year, Course

Favourite Movie and Why?

What is COMP10001?

Your First Step into the Huge World of

- Computer Science
 - Algorithms, Operating Systems...
- Software Engineering
 - Building Apps, Websites...
- Data Science
 - Netflix Recommendations, Stock Price Prediction...
- Artificial Intelligence
 - ChatGPT, Self-Driving Cars...
- Robotics
 - You know it...
- Cybersecurity
 - Keeping the above safe
- And a lot...

How to do well in COMP10001?



Getting Help

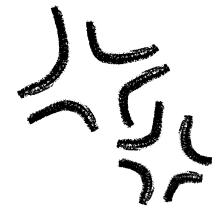
- Me (Classroom or Email `daksh.agrawal.1@unimelb.edu.au`)
- First Year Computing Centre, Level 3, Melbourne Connect (12:00 - 14:00)
- Grok Discussion Forum
- Grok Tutoring
- Consolidation Lectures
- Friends (subject to conditions)

What to Ask

Anything

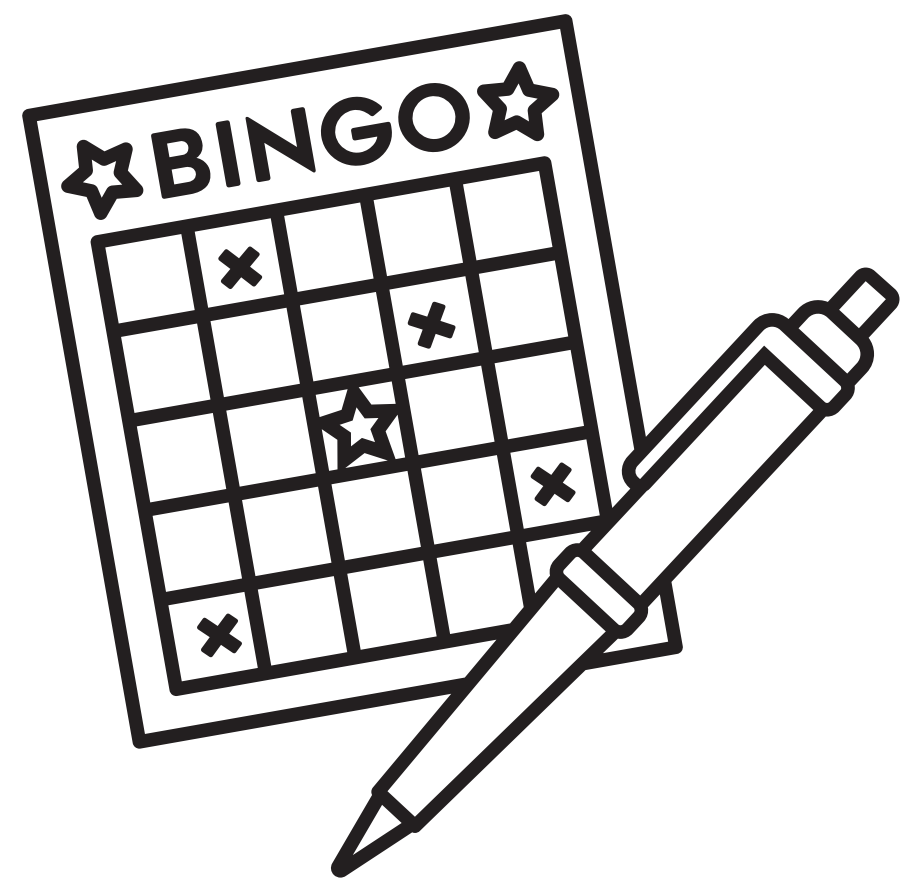
We might refuse, but doesn't hurt asking

Where not to get help?

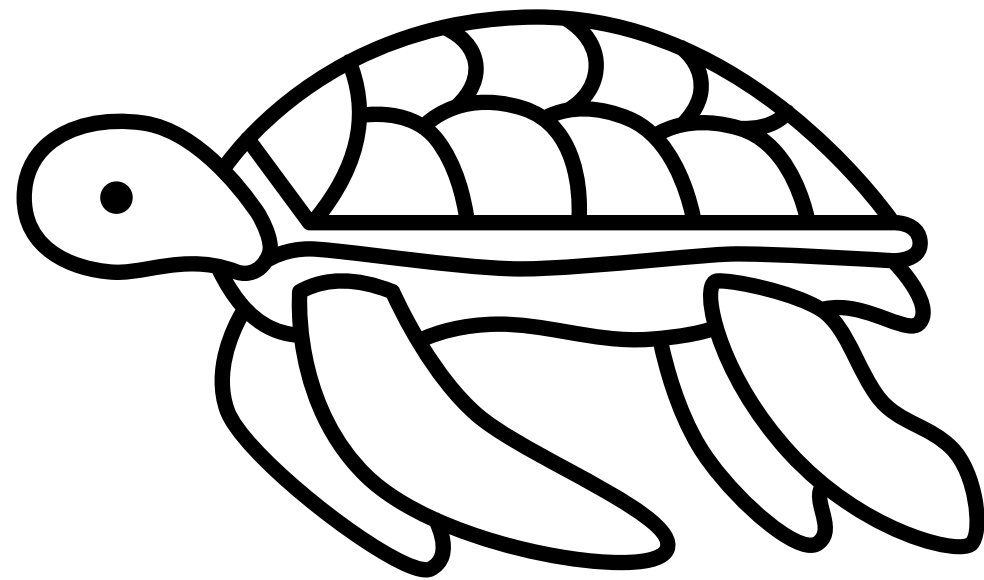


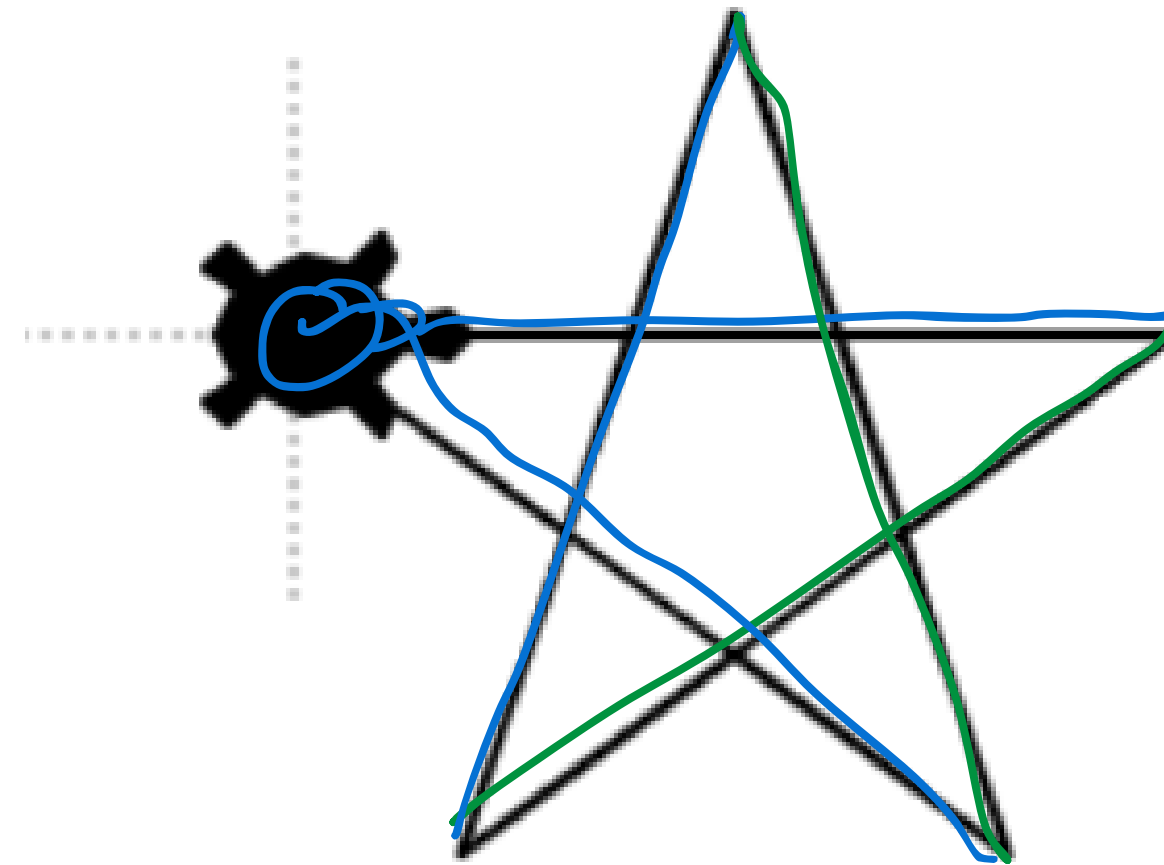
- ChatGPT
- External Tutors
- Random Websites
- Homework Help Companies

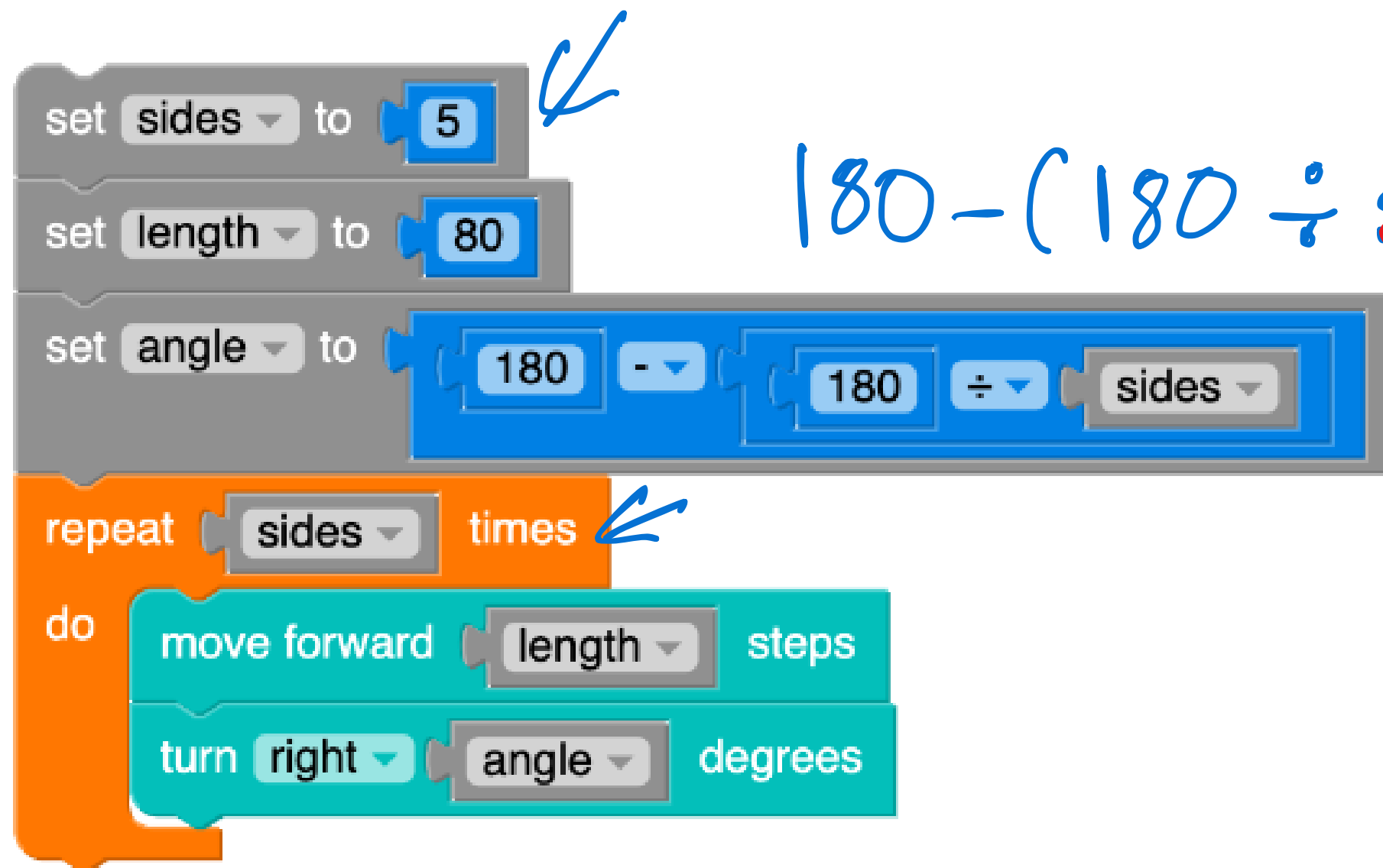
Meet your Peers (more)



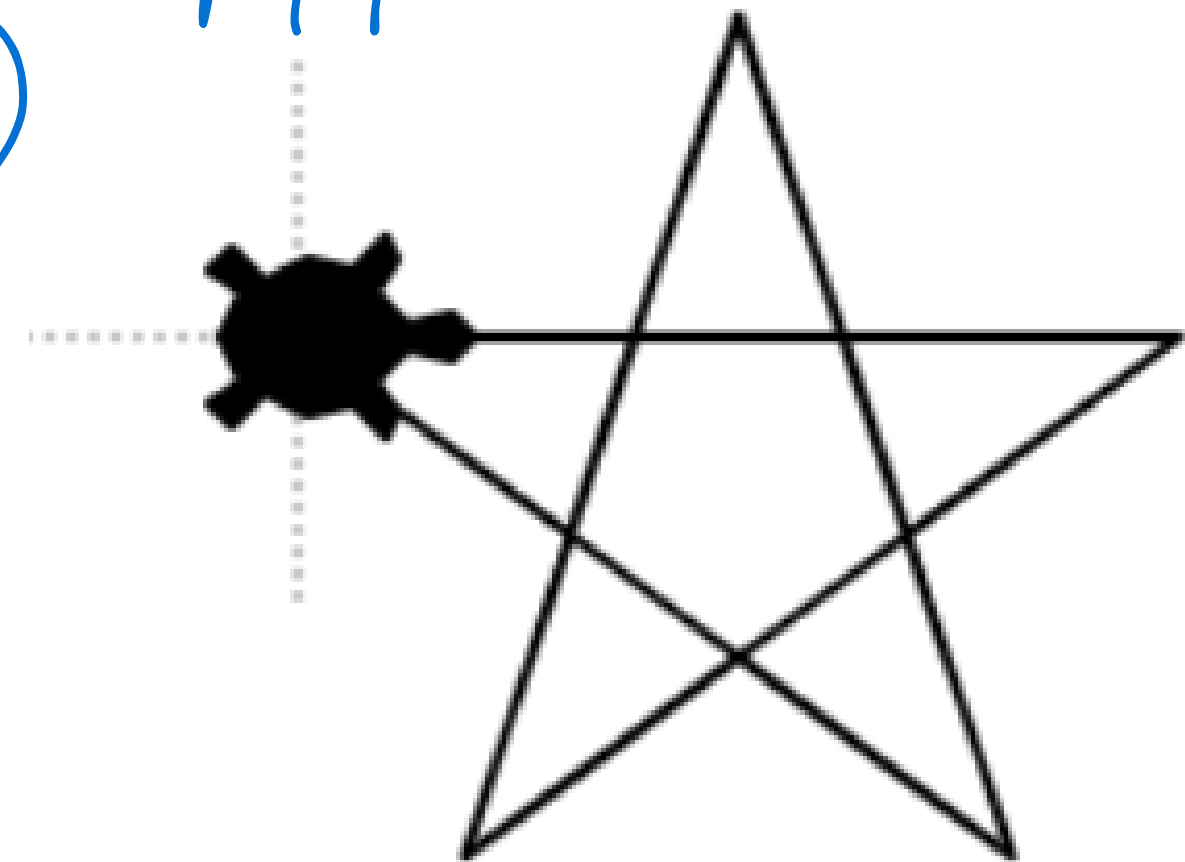
Turtle Time

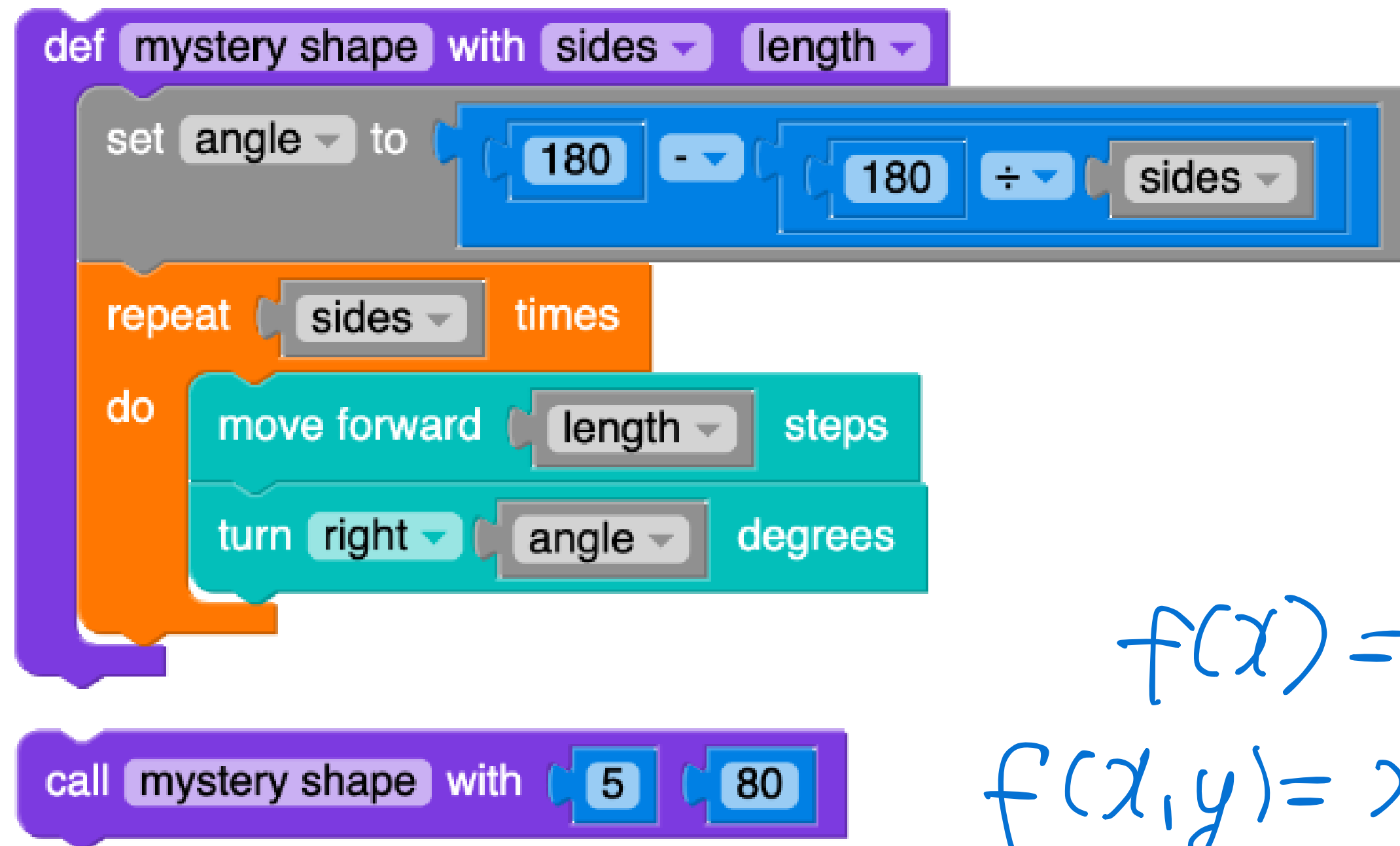






$$180 - (180 \div \text{sides}) = 144^\circ$$



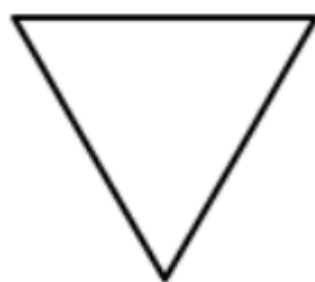


$$f(x) = x^2 + 6x + 3$$

$$f(x, y) = x^2 + y^2 + 6x$$

```
def mystery shape with sides length
  set angle to 180 - 180 ÷ sides
  repeat sides times
    do
      move forward length steps
      turn right angle degrees
```

```
pen up
move backward 170 steps
pen down
set sides to 3
repeat 5 times
  do
    call mystery shape with sides 50
    pen up
    move forward 70 steps
    pen down
    increase sides by 2
```



Shape of You



Questions!

*repeat 360 times:
forward 1 step
turn right 1°*

