The Challenge Round

Filename: `vectors`

You need to calculate the trajectories of multiple colliding objects, but before you can do that, you need to be able to represent the objects' positions.

The Problem:

Create a `vector3` class that takes three inputs in the constructor: `x`, `y`, and `z`. The vectors need to have four methods: `add`, `subtract`, `dot`, and `cross` that take a second vector3 and return the result of the operation. Printing a vector3 should display as "(x, y, z)".

`x`, `y`, and `z` should remain integers at all times.

The Input:

Two vector3's will be instantiated, and each mathematical operation will be performed.

The Output:

New vector3 results of the mathematical operations. They should display in the correct format (hint: dunder or magic methods in python)

Sample Input:

```
vector_a = vector3(5, 7, 4)
vector_b = vector3(2, 4, 8)
print(vector_a.add(vector_b))
print(vector_a.subtract(vector_b))
print(vector_a.dot(vector_b))
print(vector_a.cross(vector_b))
```

Sample Output:

```
(7, 11, 12)
(3, 3, -4)
70
(40, -32, 6)
```