

# Tortoise Racing

Adapted from [Codewars](#)

Two tortoises named A and B must run a race.

A starts with an average speed of 720 feet per hour.

Young B knows she runs faster than A, and furthermore has not finished her cabbage.

When she starts, at last, she can see that A has a 70 feet lead but B's speed is 850 feet per hour.

How long will it take B to catch A?

More generally: given two speeds and a lead, how long will it take B to catch A?

The result will be an array [hour, min, sec] which is the time needed in hours, minutes and seconds (round down to the nearest second)

**Turtle speeds will be larger than 0.**

**Turtle 1 will always start with a lead.**

## Edge Cases:

If turtle 1 is faster than turtle 2, return null.

## Eclipse Setup:

- Create a Java File called "**Tortoise**"
- Create a method called "**race**" that meets the requirements

Store the following line of code as the first line in your main method:

```
public class Tortoise
{
    public static void main(String[] args)
    {
        print(race(720, 850, 70));
        print(race(80, 91, 37));
        print(race(80, 100, 40));
    }
    public static void print(int[] list)
    {
        for(int i = 0; i < list.length; i++)
            System.out.print(list[i] + " ");
        System.out.println();
    }

    public static int[] race(int v1, int v2, int g)
    {
        return null;
    }
}
```

V1 is the velocity of turtle1

V2 is the velocity of turtle2

G is the lead (don't know why they picked g... gain?)

Values Given	Answers
(720, 850, 70)	[0, 32, 18]
(80, 91, 37)	[3, 21, 49]
(80, 100, 40)	[2, 0, 0]

**Test your code in CodeWars to ensure you're checking edge cases.**

**This assignment tests your ability to create and send a simple array of values.**

**IMPORTANT!!!**

\*\*\* Due to Java's floating point precision errors, you might have issues completing this assignment. 2 options exist:

1. Don't do any math that involves doubles (use % instead of -)
2. Add a very small # to your 1st / calculation (+.00000001)... kind of cheating out way out of the bug, but it fixes the issue.