

# Challenge 1: Calculating the Area

In this challenge, you will implement a class for calculating the area of the right angled triangle.

## We'll cover the following ^

- Problem statement
- Coding exercise

## Problem statement #

Basic maths is something we all learned in our early years. Areas of shapes, their perimeters and so on! Today, we want you to calculate the area of the **right-angled triangle** using a class.

## Coding exercise #

Write a *class* having **two** `double` type variables for `length` and `height`, an **overloaded constructor** and **one member** function called `area` which will *return* the **area** of the right-angled **triangle**.

Only write the code where instructed in the snippet below.

Test your code against our cases and see if you can pass them.

The solution is given in case you get stuck and the next lesson will include a review of the solution, but it is highly recommended that you try it yourself first!

Good Luck!

```
class rightAngleTriangle {
    //Define the member variables, constructor and
    // relevant area method

    //The constructor below is just to help you
    //You can make your own or modify the one below
    public rightAngleTriangle(int b, int a) {}
}

class challenge_one {
    public static double test(rightAngleTriangle rt) {
```



```
//decide what should be returned in the statement below;  
return -10;
```

```
}  
}
```



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In the next lesson, we will review the solution to the above challenge.