

# Exam Prep: Unit Testing

## Math Enforcer

Your task is to test the following JavaScript class:

### JS Code

You are provided with an implementation of the **mathEnforcer** object:

mathEnforcer.js

```
class MathEnforcer {  
  
  static addFive(num) {  
    if (typeof(num) !== 'number') {  
      return undefined;  
    }  
    return num + 5;  
  },  
  static subtractTen(num) {  
    if (typeof(num) !== 'number') {  
      return undefined;  
    }  
    return num - 10;  
  },  
  static sum (num1, num2) {  
    if (typeof(num1) !== 'number' || typeof(num2) !== 'number') {  
      return undefined;  
    }  
    return num1 + num2;  
  }  
  
  static verifyNum(param) {  
    if (typeof param !== 'number') throw new TypeError('Argument must be  
number');  
  }  
};
```

The methods should function correctly for **positive**, **negative** and **floating-point** numbers. In case of **floating-point** numbers, the result should be considered correct if it is **within 0.01** of the correct value.

### Hints

- Test how the program behaves when passing in **negative** values.
- Test the program with floating-point numbers (use Chai's **closeTo()** method to compare floating-point numbers).

### What to submit?

Export the object in **mathEnforcer.js** and import it in your test file to test it. Submit a **zip** file containing the **mathEnforcer.js** and **tests folder** containing the **mathEnforcer.test.js**. **DO NOT!** include the **node\_modules** folder.

File Name: MATH-ENFORCER.zip