# RomanNumeral Class Test Cases

## Test Cases for the convertRomanToInteger() method[[1]](#footnote-1)

|  |  |  |  |
| --- | --- | --- | --- |
| **Scenario** | **Object State** | **Calculations** | **Expected Results** |
|  | Roman Numeral |  | Integer |
| 1. Valid | VIII | (#ofVs \* 5) + (#ofIs \*1) = (1\*5) + (3\*1)= 5+8=  8 | 8 |
| 1. Use of invalid characters | BBB | None | Error: invalid characters used |
| 1. Lowercase letters | vii | (#ofVs \* 5) + (#ofIs \*1) = (1\*5) + (3\*1)= 5+8=  8 | 8 |
| 1. Not in additive form | IIV |  | Error: not in additive form |

## Test Cases for the convertIntegerToRoman() method1

|  |  |  |  |
| --- | --- | --- | --- |
| **Scenario** | **Object State** | **Calculations** | **Expected Results** |
|  | Integer |  | Roman Numeral |
| 1. Positive integer | 28 | 28%10  28/10=2 (XX)  8%5=3  8/5=1 (V)  3/1= 3 (I)  XXVI | XXVIII |
| 1. Integer is 0 or less | 0 | None | Error |

1. Add as many test cases as necessary to thoroughly test the method. [↑](#footnote-ref-1)