# Inverses

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## 1   Introduction

A simple test to see if something is the inverse of another number in mod would be if you can multiple the number you know by the number you are given and it is one more than a multiple of the mod you are testing. For example if you are in mod 8 and you were given the number 3, the inverse would be 3 because 3*3 is 9 which is one more than a multiple of 8.