

# CSE110 Review Questions (Solutions)

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## 1 Methods

**Question 1** Write a boolean method called `allDifferent` that takes 3 int numbers and returns true if the numbers are all different and false otherwise.

Answer:

```
public boolean allDifferent(int num1, int num2, int num3) {  
    if (num1 != num2 && num1 != num3 && num2 != num3) {  
        return true;  
    } else {  
        return false;  
    }  
}
```

**Question 2** Write a boolean method called `isPrime` that takes in an int number, and returns true if the number is prime, and false otherwise.

Answer:

```
public boolean isPrime(int n) {  
    // Question: how can we improve the performance of this loop?  
    // (Hint: what is the max number relative to n that can divide into n?)  
    for (int i = 2; i < n; i++) {  
        if (n % i == 0) {  
            return false;  
        }  
    }  
    return true;  
}
```