

Code Analysis

```
if (insuranceAdded) {  
    insurance = ((Insurable) rentable).calculateInsurancePremium(days);  
}
```

The above code is part of the calculateTotalPrice method. It will only run if insuranceAdded is true. If the insuranceAdded is true then it calculates the insurance cost for the rental and stores it in the insurance variable.

The object rentable is of type Rentable which does not have insurance methods. The Insurable interface contains the method calculateInsurancePremium, so we cast rentable to Insurable to access it.

Casting tells Java to treat an object as a different type. For example if you have an Animal object that is actually a Dog you cast it (Dog) animal to use Dog methods. Similarly (Insurable) rentable allows the program to call the insurance method and add the cost to the total price.