



## 4.6.7: Full Fraction Class

```
1 public class Fraction
2 {
3     private int numerator;
4     private int denominator;
5
6     public Fraction(int theTop, int theBottom){
7         numerator=theTop;
8         denominator=theBottom;
9     }
10
11     public int getNumerator(){
12         return numerator;
13     }
14
15     public int getDenominator(){
16         return denominator;
17     }
18
19     public void setNumerator(int x){
20         numerator=x;
21     }
22
23     public void setDenominator(int x){
24         denominator= x;
25     }
26
27     //public void add(Fraction other)
28
29     //public void subtract(Fraction other)
30
31     public void multiply(Fraction other){
32         numerator=numerator*other.numerator;
33         denominator=denominator*other.denominator;
34     }
35
36     public String toString(){
37         return numerator+"/"+denominator;
38     }
39 }
```


```

1
2 public class FractionTester extends ConsoleProgram
3 {
4     public void run()
5     {
6         Fraction half = new Fraction (1,2);
7         Fraction quarter = new Fraction (1,4);
8         Fraction improper = new Fraction (3,2);
9
10        System.out.println(half);
11        System.out.println(quarter);
12        System.out.println(improper);
13
14
15        System.out.println();
16
17        System.out.println("BEFORE:");
18        System.out.println("half: " + half);
19        System.out.println("quarter: " + quarter);
20
21        half.multiply(quarter);
22
23        System.out.println("AFTER:");
24        System.out.println("half: " + half);
25        System.out.println("quarter: " + quarter);
26
27    }
28 }
29

```

## OUTPUT

 RUN CODE

 CHECK CODE

 STOP

```

1/2
1/4
3/2

BEFORE:
half: 1/2
quarter: 1/4
AFTER:
half: 1/8
quarter: 1/4

```