



```
public class problem9_pythagoreanTriplet {  
    public static void main(String[] args) {  
  
        // use a triple nested for loop to change all 3 variables together  
        // use Math.pow() for the Pythagorean theorem  
        for (int a = 1; a <= 500; a++) {  
            for (int b = 1; b <= 500; b++) {  
                for (int c = 1; c <= 500; c++) {  
                    if (Math.pow(a, 2) + Math.pow(b, 2) == Math.pow(c, 2))  
                    {  
                        if (a + b + c == 1000) {  
                            System.out.println(a * b * c);  
                        }  
                    }  
                }  
            }  
        }  
    }  
}
```