**CHAPTER 6 EXERCISES- SOHIL JAIN**

1. Balloon Operators
   1. return d >= 0.9 \* radius && d <= 1.1 \* radius;
   2. if(counter == 0){
   3. return distance(x, y) < 0.9 \* radius;
2. public int max(int firstValue, int... otherValues)

{

for (int value : otherValues) {

if (firstValue < value ) {

firstValue = value; }

return firstValue;

}

}

1. public int max(int x, int y, int z){

return Math.max(Math.max(x,y,z));

}

}

import java.lang.Math;  
public class Exercise4{  
//Input given positive integer n  
private double n=1;  
//Declare variables  
private double square;  
private double s,r;  
//Square root and round n then square to compare  
 public void getN()  
 {  
 s = Math.sqrt(n);  
 r = Math.round(s);  
 square = Math.pow(r,2);   
 }  
//Check if n is a perfect square  
 public boolean perfectSquare()  
 {  
 if(n == square)  
 return true;  
 else  
 return false;  
 }  
 public static void main (String[] args){  
 Test T = new Test();  
 T.getN();  
 System.out.print(T.perfectSquare());  
 }  
}5. public double totalWages(double hours, double rate)

{

Double wages;

If (wages>40)

totalWages = totalWages\*1.5

return totalWages;

}

1. Ds
2. B
3. a. !(!x II !y) && (a II b)

    b. If !(x == 7) && !(x > 7)

1. A. If ((x+2) >a) II ((x-2) < b) && (y >= 0)

     b. If (a >= b) && (a >= c)  && ((a % 2)  == 0)

10. If ((Math.sqrt(x) < 3) && (x > 7))

11. public class Test

{

public boolean geometricSequence(int a, int b, int c)

{

if(((a&gt;0||a&lt;0) &amp;&amp; (b&gt;0||b&lt;0) &amp;&amp; (c&gt;0||c&lt;0)))

{

int first=a/b;

int second=b/c;

if((first)==(second))

return true;

else

return false;

}

else

return false;

}

public static void main(String[] args)

{

Test test = new Test();

System.out.print(test.geometricSequence(1,5,10));

}

}