

```

1 package tellscopeV4;
2
3 public class TeleScopeReflect extends TeleScopeRefract {
4
5     TeleScopeReflect(double focalRatio, double lensDiameter, double eyePieceFocalLength)
6     {
7         super(eyePieceFocalLength, eyePieceFocalLength, eyePieceFocalLength);
8     }
9
10
11
12
13     //calcDistToSecond method
14     public double calcDistToSecond()
15     {
16         //calculate outer diameter of tube
17         outerDiameter = lensDiameter + 1;
18
19         //calculate distance to second equation
20         distToSecond = (lensDiameter * focalRatio) - ((outerDiameter / 2) + RIH + 1);
21
22         //return the distance to second
23         return distToSecond;
24     }
25
26
27     //calcSecondarySizeMinor method
28     public double calcSecondarySizeMinor()
29     {
30         //calculate the secondary size major axis equation
31         secondarySizeMinor = ((outerDiameter / 2) + (RIH + RACKTRAVEL)) / focalRatio;
32
33         //return the secondary size major axis
34         return secondarySizeMinor;
35     }
36
37     //calcSecondarySizeMajor method
38     public double calcSecondarySizeMajor()
39     {
40         //calculate secondary size minor equation
41         secondarySizeMajor = secondarySizeMinor * SECONDEQCONSTANT;
42
43         //return the secondary size minor axis
44         return secondarySizeMajor;
45     }
46
47
48
49 }
50

```