

Class PolygonTurtle

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```
1  import edu.fcps.Turtle;
2  public class PolygonTurtle extends Turtle
3  {
4      private double mySize;
5      private int mySides;
6      /**
7       * Constructor for PolygonTurtle with no arguments
8       */
9      public PolygonTurtle()
10     {
11         super();
12         mySize = 50.0;
13         mySides = 6;
14     }
15
16     /**
17      * Constructor for PolygonTurtle with 2 arguments
18      *
19      * @param n    Size of sides
20      * @param s    Number of sides
21      */
22     public PolygonTurtle(double n, int s)
23     {
24         mySize = n;
25         mySides = s;
26     }
27
28     /**
29      * Constructor for PolygonTurtle with 5 arguments
30      *
31      * @param x    Initial x coordinate
32      * @param y    Initial y coordinate
33      * @param h    Initial heading degrees
34      * @param n    Size of sides
35      * @param s    Number of sides
36      */
37     public PolygonTurtle(double x, double y, double h, double n, int s)
38     {
39         super(x, y, h);
40         mySize = n;
41         mySides = s;
42     }
43
44     /**
45      * Accessor method setSize to change private size variable
46      *
47      * @param n    Double to set size to
48      */
49     public void setSize(double n)
```

```
50     {
51         mySize = n;
52     }
53
54     /**
55      * Accessor method setSides to change private sides variable
56      *
57      * @param    s    Double to set sides to
58      */
59     public void setSides(int s)
60     {
61         mySides = s;
62     }
63
64     /**
65      * Method drawShape draws shape according to sides and size
66      */
67     public void drawShape()
68     {
69         setPenDown(true);
70         for (int i=0;i<mySides;i++){
71             forward(mySize);
72             turnRight(360/mySides);
73         }
74         setPenDown(false);
75     }
76
77     /**
78      * Method drawShape overloaded with an argument for number of sides
79      *
80      * @param    s    Number of sides
81      */
82     public void drawShape(int s)
83     {
84         setSides(s);
85         setPenDown(true);
86         for (int i=0;i<mySides;i++){
87             forward(mySize);
88             turnRight(360/mySides);
89         }
90         setPenDown(false);
91     }
92 }
```