

GEOTURTLE GO!

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5:49 AM

- I. drawSide
 - a. **Input:** Two doubles representing length and angle respectively.
 - b. **Output:** Does not output values. Creates straight line of appropriate length and changes object orientation
 - c. **Constraints:** Inputs are compatible with variable type double (i.e. are numerical)
 - d. **Assumptions:** Turtle exists on an island.
 - e. **Relationships:** Uses lengths of the sides of the geometric shapes drawn.
- II. Rectangle
 - a. **Input:** One double representing side lengths and breadths respectively.
 - b. **Output:** Does not output values. Creates a rectangular polygon.
 - c. **Constraints:** Inputs are compatible with variable type double (i.e. are numerical)
 - d. **Assumptions:** Turtle exists on an island.
 - e. **Relationships:** Uses drawSide to construct itself.
- III. Pentagon
 - a. **Input:** One double representing side lengths.
 - b. **Output:** Does not output values. Creates a 5 sided polygon.
 - c. **Constraints:** Inputs are compatible with variable type double (i.e. are numerical).
 - d. **Assumptions:** Turtle exists on an island.
 - e. **Relationships:** Uses drawSide to construct itself.
- IV. Hexagon
 - a. **Input:** One double representing side lengths.
 - b. **Output:** Does not output values. Creates a 6 sided polygon.
 - c. **Constraints:** Inputs are compatible with variable type double (i.e. are numerical).
 - d. **Assumptions:** Turtle and exists on an island.
 - e. **Relationships:** Uses drawSide to construct itself.
- V. Octagon
 - a. **Input:** One double representing side lengths.
 - b. **Output:** Does not output values. Creates a 8 sided polygon.
 - c. **Constraints:** Inputs are compatible with variable type double (i.e. are numerical).
 - d. **Assumptions:** Turtle and exists on an island.
 - e. **Relationships:** Uses drawSide to construct itself.
- VI. Square
 - a. **Input:** One double representing side lengths.
 - b. **Output:** Does not output values. Creates a 4 sided polygon.
 - c. **Constraints:** Inputs are compatible with variable type double (i.e. are numerical).
 - d. **Assumptions:** Turtle exists on an island.
 - e. **Relationships:** Uses drawSide to construct itself.
- VII. DrawCastle
 - a. **Input:** None.
 - b. **Output:** A gay, grey-scale castle.
 - c. **Constraints:** Turtle exists on island.
 - d. **Assumptions:** The given arguments are valid for their corresponding variable types.
 - e. **Relationships:** Uses all previously defined methods.