Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## PentagonCrazy Worksheet

1. Draw the translation from the English to the code.

***// If the Tortoise’s pen width is greater than 4, then…***

**if** (4 < Tortoise.*getPenWidth*()){…}

1. Draw the translation from the English to the code.

***// Turn the tortoise 1/5th of 360 degrees***

Tortoise.*turn*(360.0 / 5);

1. Do the following for the code below:

|  |  |
| --- | --- |
| **public** **class** PentagonCrazy  {  **public** **static** **void** **main**(String[] args)  {  Tortoise.*setSpeed*(10);  *createColorPalette*();  *drawPentagon*();  }  **private** **static** **void** **createColorPalette**()  {  ColorWheel.*addColor*(Colors.Blues.*SteelBlue*);  ColorWheel.*addColor*(Colors.Purples.*DarkOrchid*);  ColorWheel.*addColor*(Colors.Blues.*DarkSlateBlue*);  ColorWheel.*addColor*(Colors.Blues.*Teal*);  ColorWheel.*addColor*(Colors.Purples.*Indigo*);  }  **private** **static** **void** **adjustPen**()  {  Tortoise.*setPenColor*(ColorWheel.*getNextColor*());  Tortoise.*setPenWidth*(Tortoise.*getPenWidth*() + 1.0);  **if** (4 < Tortoise.*getPenWidth*())  {  Tortoise.*setPenWidth*(1);  }  }  **private** **static** **void** **drawPentagon**()  {  **for** (**int** i = 1; i <= 200; i++)  {  *adjustPen*();  Tortoise.*move*(i);  Tortoise.*turn*(360.0 / 5);  Tortoise.*turn*(1);  }  }  } | 1. Circle the bracket that closes the ‘if’ statement. 2. Circle the code that returns either ‘true’ or ‘false’. HINT: 2 places 3. Draw the flow of the program by drawing arrows from where methods are called to where they are implemented. 4. What happens if you run Color Wheel get next color without having set up the Color Wheel first and why? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |