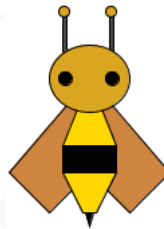


- 1 With value ranges from 0–255 for each component, how many total possible colours can be expressed using the RGB colour model? (1)
- 2 Without programming them, describe the colours represented by each of the following. (1)

Note: This question is only looking for general descriptions of the colours.

 - (a) `fill(255, 0, 255);`
 - (b) `fill(0, 255, 255);`
 - (c) `fill(125, 125, 125);`
- 3 Add colour to the Processing Bee from Assignment #1. (2)

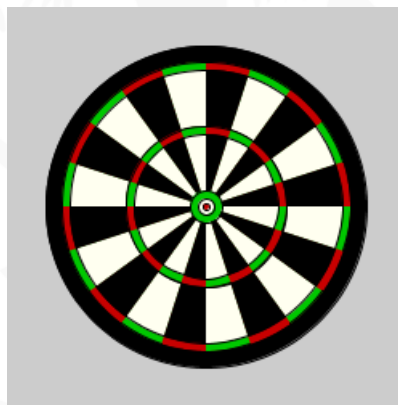
Hint: Yellow colours predominantly use red and green colour components, with blue being added to bring the colour closer to brown.



- 4 Why do you think the designers of the Processing language decided there was a need for both a grayscale `fill()` method as well an RGB model `fill()` method (which can easily be used to express various shades of gray)? (2)
- 5 Use the Processing reference for the `arc()` drawing method (https://processing.org/reference/arc_.html) to assist you in emulating the following image of a dartboard. (6)

Warning: Using only the knowledge we have currently about the Processing language, this is a pretty long, tedious task; however, once you've determined how to draw the individual pieces of the board, the remaining pieces are not difficult to program.

Hint: Because there are 20 different "wedges" in the dart board, each arc should be $\frac{\pi}{10}$ radians wide. The value of π is accessible via the `PI` keyword in Processing.



- 6 Explain the iterative and incremental process you took in creating your dart board program. (4)