Instruction: Please concisely answer the following questions.

1. (VGA: 6 points) Please explain the relation of the following signals in VGA: R, G, B, Hsync, Vsync. In particular, give an example of how to show a color onto the screen. (You are welcome to give an example in VerilogHDL.)

2. (UART - 4 points) In UART, there is no synchronous signal sending between the two devices. They simply use their own clock but counting at the same rate. Please explain the role of 8n1 protocol in such communication.