

Theory Task: Mapping

- 3.1 For the signal space constellation diagram shown in Fig. 1, find the average energy of the red and blue constellations (independently).

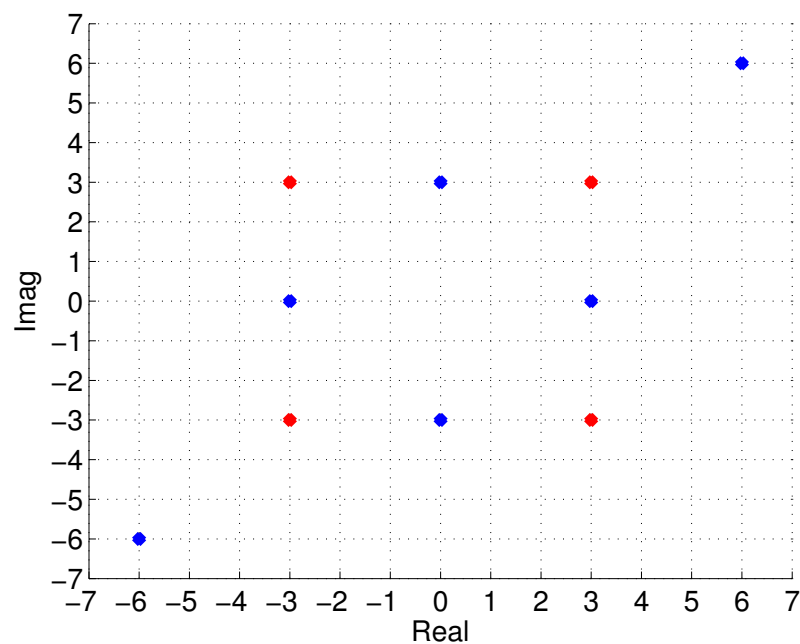


Figure 1: Constellation diagram for task 3.1

- 3.2 Normalize the average transmitted symbol energy to 1 for the two constellations independently. Plot the energy-normalized constellation points of the two schemes (red and blue) on the same figure. What observations can you make?