

Puzzle

$P_1 = 2 - 10i$ is a point in the complex plane.

$$P_2 = P_1 + (3 + 5i)$$

$$P_3 = \overline{P_2} \text{ (complex conjugate of } P_2 \text{)}$$

$$P_4 = iP_3$$

$$P_5 = P_4 - (1 + 10i)$$

$$P_6 = 2P_5$$

$$P_7 = P_6 + 12i$$

$$P_8 = P_7 + 10$$

Plot all these points in the complex plane. Connect the dots from P_1 up to P_8 and back to P_1 . Then for each even numbered point P_{2n} , draw a straight line between P_{2n} and P_{2n+3} (modulo 8). What do you get?