

Exercise 11

Use mathematical induction to show that when $n = 2, 3, \dots$,

$$(a) \overline{z_1 + z_2 + \cdots + z_n} = \overline{z_1} + \overline{z_2} + \cdots + \overline{z_n}; \quad (b) \overline{z_1 z_2 \cdots z_n} = \overline{z_1} \overline{z_2} \cdots \overline{z_n}.$$