

1) Evaluate the expressions.

a)  $\sqrt{-16}$

b)  $(9i)^2$

c)  $\sqrt{-121} \cdot \sqrt{-81}$

4) Calculate  $(3 + 8i)(3 - 8i)$ .

5) Calculate  $(11 + 7i) \div (5 - 9i)$ .

2) For  $z_1 = 11 + 7i$  and  $z_2 = 5 - 9i$ , calculate

a)  $z_1 + z_2$

b)  $z_1 - z_2$

c)  $z_1 \cdot z_2$

3) Write down the conjugate of:

a)  $-17i$

b)  $2 - 4i$