



Division with Complex Numbers

Worksheet 1

Answer each of the following without a calculator, using the boxes provided for your answers.

Question 1

Given $z_1 = 3 + 4i$ and $z_2 = 1 + 2i$, find:

- a) $z_1 \div z_2$
- b) $z_2 \div z_1$

Question 2

Given $z_2 = -2 + 3i$ and $z_4 = 5 + i$, find:

- a) $z_3 \div z_4$
- b) $z_4 \div z_3$



Question 3

Given $z_5 = 6 - 2i$ and $z_6 = 8i$, find:

- a) $z_5 \div z_6$
- b) $z_6 \div z_5$

Question 4

Given $z_1 = 1 + 3i$, $z_2 = 4 - i$ and $z_3 = 5 + 7i$, find:

$$z_1 + z_2 \div z_3$$



Question 5

Given $z_1 = 5 - 3i$, $z_2 = 4i$ and $z_3 = 1 + 2i$, find:

$$3z_1 - \frac{z_2}{2z_3}$$