

Adding and Subtracting Complex Numbers

1. $(3 - 4i) + (5 + 2i)$

2. $(3 + 4i) - (5 - 2i)$

3. $(2 - 7i) - (4 + 3i)$

Multiplying Complex Numbers

1. $(3 - 4i) \times (5 + 2i)$

2. $(2 + 7i) \times (4 - 3i)$

Dividing Complex Numbers

1. $\frac{5 - 2i}{3 + 4i}$

2. $\frac{4 + 3i}{2 - 6i}$

Polar Form

Find the polar form of the following complex numbers:

1. $1 + 1i$

2. $0 - 2i$

3. $3 + 4i$

4. $3 - 2i$

Find the $a + bi$ form of the following complex numbers:

1. $1 \angle \frac{\pi}{2}$

2. $7 \angle \frac{5\pi}{3}$

3. $5 \angle \frac{3\pi}{4}$

4. $3 \angle \pi$

Exponentiation

1. $(1 - 1i)^3$

2. $(5 + 2i)^2$

3. $(8 - 4i)^7$

4. $(3 + 7i)^9$