

Liceo Scientifico Statale M.Grigoletti, Pordenone
Modulo CLIL sui Numeri Complessi
Homework - Lesson 2

Luciano Battaia - Mariateresa Esposito

Simplify the following expressions

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

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

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

4. $(3 + 2i)^2$

5. $(2 - i)^3$

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

7. $\frac{(1+i)^2 - (1-i)^2}{(2-i)(1+i)}$

8. $i + i^2 + i^3 + \dots + i^{12}$

9. $(1 + 2i) \frac{2-i}{1-2i}$

10. $\frac{i}{1+i} + \frac{1}{1-i}$

11. $(1 + i)^4 + (1 - i)^4$