

## Departamento de Matemáticas $1^{\underline{0}}$ Bachillerato

E S PEDRO CERRADA

24 - Complejos

## 1. p045e01 - Calcula:

(a) 
$$(7-2i)^2 + (3+4i)(5-2i)$$

**Sol:** 
$$68 - 14i$$

(b) 
$$(2+i)^2(3-2i) + (5-i)i^2$$

**Sol:** 
$$12 + 7i$$

(c) 
$$(\sqrt{3}-2i)^2+(2\sqrt{3}-5i)(1-2i)$$

**Sol:** 
$$-11 + 2\sqrt{3} + i\left(-8\sqrt{3} - 5\right)$$

(d) 
$$(i^7-1)(i^{16}+i^3-i^9)^5+(1-2i)^5(1+i)$$

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