

## Alg2 Complex Numbers Practice

### Addition

$$(-7 + 3i) + (4i + 5)$$

$$7i - 2$$

$$(-5i - 2) + (9 - 12i)$$

$$-17i + 7$$

$$(11i - 3) + (6 - i)$$

$$10i + 3$$

$$(15 - 9i) + (2i - 6)$$

$$-7i + 9$$

### Subtraction

$$(14i - 3) + (5 + 11i)$$

$$3i - 8$$

$$(5 - 6i) + (+4 + 5i)$$

$$-1i + 9$$

$$(2 - i) + (8i + 5)$$

$$-9i - 3$$

$$(-9i + 4) + (+7i + 8)$$

$$-2i - 4$$

### Multiplication

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

$$\begin{array}{r} 20i + 10i^2 - 12 - 6i \\ \hline -10 \end{array}$$

$$14i - 22$$

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

$$\begin{array}{r} 3 + 2i + 6i + 4i^2 \\ \hline -4 \end{array}$$

$$8i - 1$$

$$(6 - 5i)(3 - 4i)$$

$$\begin{array}{r} 18 - 24i - 15i + 20i^2 \\ \hline -20 \end{array}$$

$$-39i - 2$$

$$(-5 + 4i)(8 - 6i)$$

$$\begin{array}{r} -40 + 30i + 32i - 24i^2 \\ \hline +24 \end{array}$$

$$62i - 16$$

$$(7 + 4i)(7 - 4i)$$

$$\begin{array}{r} 49 - 28i + 28i - 16i^2 \\ \hline +16 \end{array}$$

$$65$$

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

$$\begin{array}{r} 15 + 9i - 5i - 3i^2 \\ \hline +3 \end{array}$$

$$4i + 18$$