

# Algebra II – Complex Numbers



## Who Said It?



I can accept failure, everyone fails at something. But I can't accept not trying.

Simplify each of the following expressions. Place the letter beside each problem above the correct answer in the answer blanks below to find out who is credited with the above quote.

1.  $(3 + 2i) + (5 - 7i)$

**R**

2.  $(39 - 14i) - (-37 - 17i)$

**A**

3.  $(11 - 15i) - (5 + 18i)$

**H**

4.  $(8 + 25i) + (-38 + 10i)$

**D**

5.  $(6 - 36i) - (8 + 11i) + (2 + 21i)$

**E**

6.  $(2 + 9i)(3 + 4i)$

**D**

7.  $(5 - 8i)(4 + 7i)$

**A**

8.  $(4 - 6i)(3 - 2i)$

**E**

9.  $(8 + 11i)(8 - 11i)$

**I**

10.  $(5 - 2i\sqrt{3})(7 + 4i\sqrt{3})$

**C**

11.  $(3 + 4i\sqrt{5})(2 - 7i\sqrt{5})$

**O**

12.  $\frac{5}{3 + 2i}$

**N**

13.  $\frac{7 - 3i}{5 + i}$

**J**

14.  $\frac{10 + 3i}{4 - 5i}$

**M**

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

**L**

$\frac{25 + 62i}{41}$	185	$59 + 6i\sqrt{3}$	$6 - 33i$	$76 + 3i$	$-26i$	$\frac{-27 + 11i\sqrt{3}}{26}$

$\frac{16 - 11i}{13}$	$146 - 13i\sqrt{5}$	$8 - 5i$	$-30 + 35i$	$76 + 3i$	$\frac{15 - 10i}{3}$