

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Multiplying and Dividing Complex Numbers****Simplify.**

1)  $(7 + 3i)(7 + 8i)$

2)  $\frac{4-3i}{-4i}$

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

4)  $\frac{2+4i}{14+4i}$

5)  $2(3i) - (5i)(-8 + 5i)$

6)  $(4i)(-i)(2 - 5i)$

7)  $\frac{4+i}{2-5i}$

8)  $\frac{5}{-10i}$

9)  $\frac{-2-9i}{-2+7i}$

10)  $\frac{-3-10i}{5i}$



1)  $(7 + 3i)(7 + 8i)$

$25 + 77i$

2)  $\frac{4-3i}{-4i}$

$\frac{3}{4} + i$

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

$9 + 40i$

4)  $\frac{2+4i}{14+4i}$

$\frac{11+12i}{53}$

5)  $2(3i) - (5i)(-8 + 5i)$

$25 + 46i$

6)  $(4i)(-i)(2 - 5i)$

$8 - 20i$

7)  $\frac{4+i}{2-5i}$

$\frac{3}{29} + \frac{22i}{29}$

8)  $\frac{5}{-10i}$

$\frac{i}{2}$

9)  $\frac{-2-9i}{-2+7i}$

$-\frac{59}{53} + \frac{32i}{53}$

10)  $\frac{-3-10i}{5i}$

$\frac{3i-10}{5}$