

Name : _____

Multiplying Complex Numbers

Sheet 1

Simplify.

1) $(2 + \sqrt{-4})(3 + 5i)(-4 - i)$

2) $(4i)(\sqrt{5} + 2i)$

3) $(-2i)(-13 + 3i)$

4) $(-5 + i)(12 - i)(-3)$

5) $\left(\frac{-1 + i}{3}\right)(-6i - 4)$

6) $(3 - 7i)(-7 + 2i)$

7) $(-3i)(i)(11i)$

8) $(2 + 9i)(8 + i)$

9) $(-9 - 12i)(2\sqrt{2})$

10) $(-1 + 4i)(10 - \sqrt{-9})$

Name : _____

Answer key

Multiplying Complex Numbers

Sheet 1

Simplify.

1) $(2 + \sqrt{-4})(3 + 5i)(-4 - i)$

$32 - 60i$

2) $(4i)(\sqrt{5} + 2i)$

$-8 + 4\sqrt{5}i$

3) $(-2i)(-13 + 3i)$

$6 + 26i$

4) $(-5 + i)(12 - i)(-3)$

$177 - 51i$

5) $\left(\frac{-1 + i}{3}\right)(-6i - 4)$

$\frac{10}{3} + \frac{2}{3}i$

6) $(3 - 7i)(-7 + 2i)$

$-7 + 55i$

7) $(-3i)(i)(11i)$

$33i$

8) $(2 + 9i)(8 + i)$

$7 + 74i$

9) $(-9 - 12i)(2\sqrt{2})$

$-18\sqrt{2} - 24\sqrt{2}i$

10) $(-1 + 4i)(10 - \sqrt{-9})$

$2 + 43i$