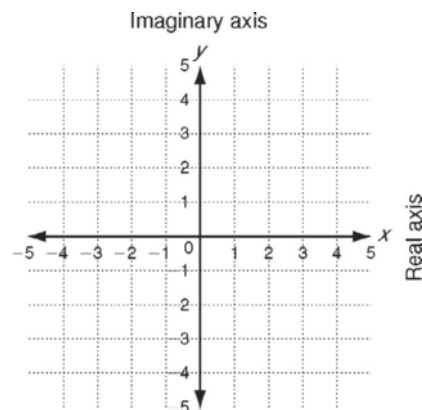


**LESSON**  
**5-9**

**Practice A**  
**Operations with Complex Numbers**

Graph each complex number.

1.  $2i$
2.  $-4i$
3.  $3 + i$
4.  $-3 - 2i$
5.  $2 + 3i$
6.  $4 - 4i$



Find each absolute value.

7.  $|6 + 2i|$
8.  $|3 + i|$
9.  $|3 - 4i|$

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Add or subtract. Write the result in the form  $a + bi$ .

10.  $6i + 4i$
11.  $-i - 3i$
12.  $(4i) + (2 + 8i)$

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13.  $(1 + 2i) + (3 + 4i)$
14.  $(2 - 7i) - (5 - 3i)$
15.  $(7 - 4i) + (3 - i)$

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Multiply. Write the result in the form  $a + bi$ .

16.  $2(3i)$
17.  $-4(5i)$
18.  $2(6 + 8i)$

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19.  $2i(3 + 5i)$
20.  $(3 + i)(1 - 4i)$
21.  $(1 + 2i)(2 + 5i)$

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Simplify.

22.  $i^7$
23.  $\frac{2 + 5i}{3i}$
24.  $\frac{8 + 2i}{1 - 3i}$

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