

**Properties of Complex Numbers**

\* Distance from the origin! \*

Find the absolute value of each complex number.

1)  $|7 - i| = \sqrt{(7)^2 + (-1)^2} = \sqrt{49 + 1}$   
 Ex  $= \sqrt{49 + 1} = \sqrt{50} = \sqrt{25 \cdot 2} = \boxed{5\sqrt{2}}$

2)  $|-5 - 5i|$

3)  $|-2 + 4i|$

4)  $|3 - 6i|$

5)  $|10 - 2i|$

6)  $|-4 - 8i|$

7)  $|-4 - 3i|$

8)  $|8 - 3i|$

9)  $|1 - 8i|$

10)  $|-4 + 10i|$

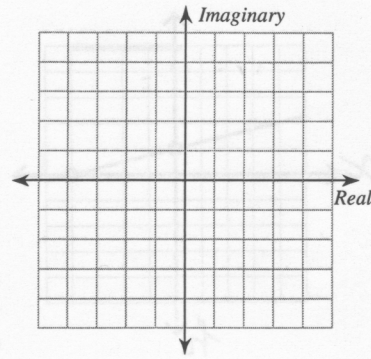
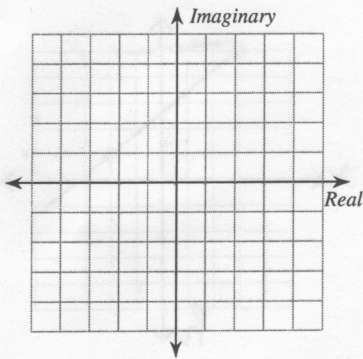
*Do on another sheet of paper!*

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Graph each number in the complex plane.

11)  $-3 + 4i$

12)  $-1 + 5i$



13)  $-1 - 4i$

14)  $4 + 4i$

