

Complex Numbers

Date _____ Period _____

Find the absolute value of each complex number.

1) $|6 + 4i|$

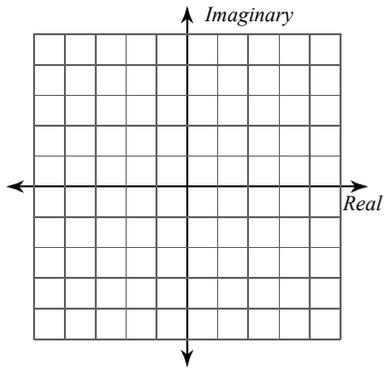
2) $|-4 - 4i|$

3) $|3i|$

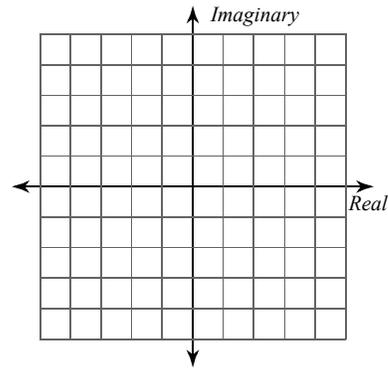
4) $|-6 + 4i|$

Graph each number in the complex plane.

5) $-4 + i$

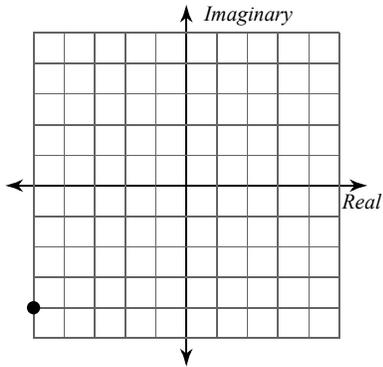


6) $-1 + 4i$

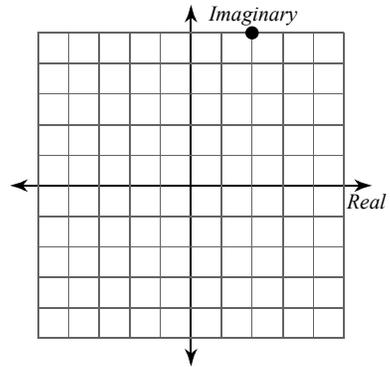


Identify each complex number graphed.

7)



8)



Simplify.

9) $(-3i) + (5 + 3i) + 6$

10) $(7 - i) + (-2 + 4i)$

11) $(-3 - i) + (2i) - (2i)$

12) $(-4 + 6i) + (-6 + 4i)$

13) $(-1 + i)(8 - i)$

14) $(6 + i)^2$

15) $(3i)(3i)(-8 + 7i)$

16) $(6i)(3i)(-8 - 2i)$

17) $(-4 + 7i)(2 + 4i)$

18) $(-2 + 8i)^2$

19) $7(2 + 2i) - 7 \cdot (7i)$

20) $(-7i)(4 - 4i) - (6i)(4 + 6i)$

21) $\frac{-10 + 2i}{-6 + 3i}$

22) $\frac{1 + 6i}{6 + 9i}$

23) $\frac{4}{-9 + 9i}$

24) $\frac{9i}{8 + 2i}$