LESSON 1.4

Exercise Set A

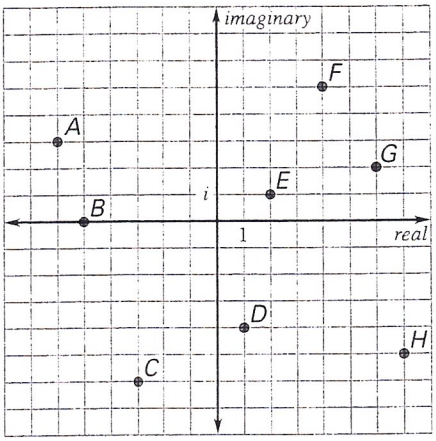
MM2N1b Write complex numbers in the form $a + bi$.

MM2N1d Simplify expressions involving complex numbers.

Match the complex number with the correct letter on the graph.

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

5. $4 + 5i$ **6.** $-6 + 3i$ **7.** $6 + 2i$ **8.** $7 - 5i$



Find the absolute value of the complex number.

9. $5 - 2i$ **10.** $5 + 12i$

11. $-3 - 4i$ **12.** $2 + 3i$

13. $2 - 6i$ **14.** $6 - 5i$

15. $1 + 2i$ **16.** $9 + 40i$

17. $5i$ **18.** $-2 + 12i$

19. $4 + 6i$ **20.** $-5 - i$

21. $-2 + i$ **22.** $-7 - 5i$

23. $-3 - 11i$ **24.** $2i$

25. $-2 - 5i$ **26.** $1 - 4i$

27. $2 - 7i$ **28.** $-2 + 3i$

29. $5 + 4i$ **30.** $4 - 2i$

31. $\sqrt{5} + 2i$ **32.** $\sqrt{11} + 5i$

33. $2 - i\sqrt{21}$ **34.** $-\sqrt{23} + i\sqrt{26}$

35. What is the absolute value of $a - bi$?

36. Is every complex number an imaginary number? *Explain.*

UNIT 1