

Name: _____ Period: _____

2.6 - Conjugates of Complex Numbers 2019-2020 (Honors - H2.1)**Simplify. If the answer is complex, write it in the form $a + bi$.**

1. $(-10+i)-(9+5i)$

2. $i(13-3i)$

3. $(-3-7i)(-6+9i)$

Find the conjugates of the following complex numbers.

4. $3+7i$

5. $3-5i$

6. $-10-2i$

7. $-2+4i$

8. $8i$

9. $-9i$

10. 3

11. $12-15i$

12. -2

Write in the standard complex form: $a + bi$, by multiplying by the conjugate of the denominator. SHOW ALL OF YOUR WORK!

13. $\frac{3}{7i}$

14. $\frac{10}{-3i}$

15. $\frac{-7}{-4i}$

16. $\frac{15}{-5i}$

17. $\frac{-12}{12i}$

18. $\frac{-5+2i}{-2i}$

19. $\frac{-3+10i}{6i}$

20. $\frac{-6+5i}{-i}$

21. $\frac{7i}{3+2i}$

$$22. \frac{6i}{-1+4i}$$

$$23. \frac{8}{4-i}$$

$$24. \frac{12}{-6+4i}$$

$$25. \frac{2-3i}{4-3i}$$

$$26. \frac{1+4i}{5-12i}$$

$$27. \frac{6-i}{1+i}$$

$$28. \frac{2+3i}{1-i}$$

$$29. \frac{2}{-3i}$$

$$30. \frac{-3-7i}{7+10i}$$

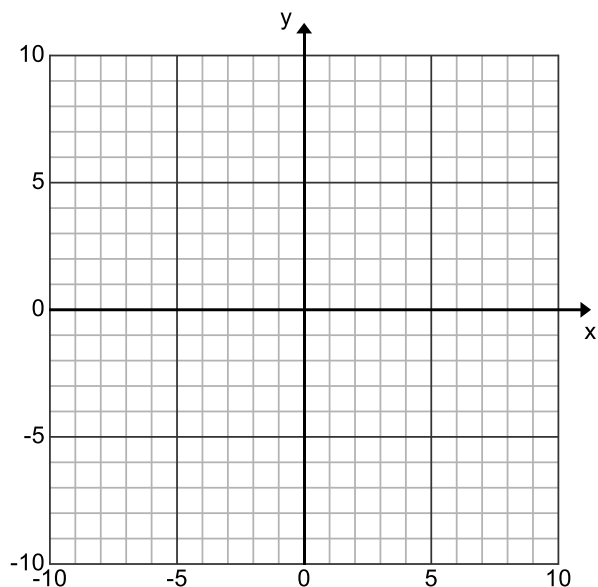
$$31. \frac{2-5i}{3i}$$

$$32. \frac{-9+5i}{7-2i}$$

$$33. \frac{12-12i}{-4i}$$

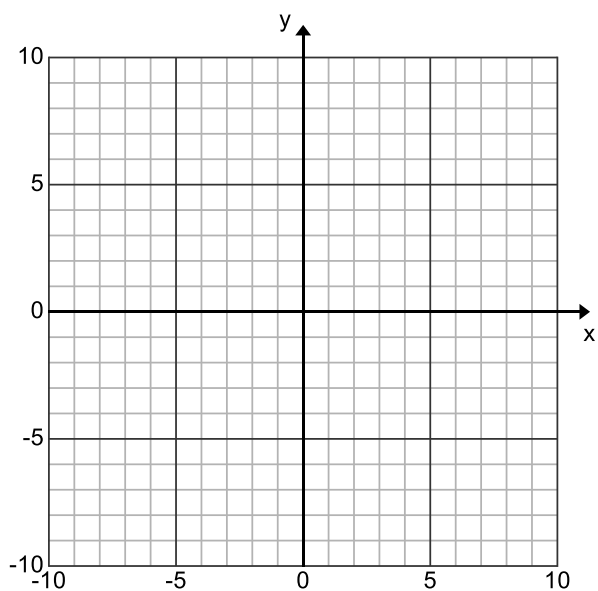
For each of the following: 1) List the transformations in the correct order. 2) Create a table to show the transformations on the key points. 3) State the vertex or endpoint. 4) Sketch the graph.

34. $f(x) = -2x^2 + 4$



Vertex or Endpoint: _____

35. $f(x) = \frac{1}{2}\sqrt{x-1} - 3$



Vertex or Endpoint: _____

