

Adding and Subtracting Complex Numbers (ALG.CN.04)

Perform each operation and write the result in standard form.

1. $(5 - 3i) - (8 - i)$

2. $(-8 - 5i) + (3 + 2i)$

3. $(9 - 2i) + (-3 - 5i) - (6 - i)$

4. $3i - (2 - 5i) + (6 - 2i)$

5. $(-3 + \sqrt{-12}) + (9 + \sqrt{-27})$

6. $(14 - \sqrt{-54}) - (-4 + \sqrt{-150})$

7. $8i - (6 + 3i) + 2 - 5i$

8. $-9 + \left(\frac{1}{2} + \frac{5}{6}i\right) - \left(\frac{5}{3} - \frac{5}{3}i\right) - \frac{i}{2}$

9. $\left(-\frac{11}{6} + \sqrt{-\frac{45}{4}}\right) - \left(\frac{2}{3} - \sqrt{-\frac{20}{9}}\right)$

10. $(-4.2 + 0.7i) + (1.8 - 2.2i)$