

Simplify each number using the imaginary unit i

1. $\sqrt{-100}$

2. $\sqrt{-2}$

3. $\sqrt{-48}$

4. $\sqrt{-36}$

Simplify each expression.

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

6. $(-12i) - (3 + 3i)$

7. $(-2i)(5 + 4i)$

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

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

10. $(-2 + \sqrt{-9}) + (-1 - \sqrt{-36})$

Write each quotient as a complex number.

11. $\frac{5 + 4i}{7i}$

12. $\frac{-1 + 5i}{3 - 2i}$

13. $\frac{2 - 6i}{2 - 3i}$