

1.5A Write square roots of negative numbers in terms of i

In 1 – 14, express each number in terms of i , and simplify. In 15-20, perform the addition or subtraction, write answer in the form $a + bi$.

1. $\sqrt{-36}$

2. $\sqrt{-100}$

3. $-\sqrt{-81}$

4. $2\sqrt{-49}$

5. $\frac{1}{8}\sqrt{-64}$

6. $-\frac{2}{3}\sqrt{-9}$

7. $\sqrt{-\frac{1}{4}}$

8. $\sqrt{-\frac{16}{25}}$

9. $\sqrt{-3}$

10. $-\sqrt{-10}$

11. $\sqrt{-20}$

12. $-\sqrt{-28}$

13. $\frac{2}{3}\sqrt{-72}$

14. $4\sqrt{-\frac{1}{8}}$

15. $(3 + 6i) + (4 - 2i)$

16. $(9 - 6i) - (12 + 2i)$

17. $(8 - 3i) + (2 + 5i)$

18. $(9i - 2) - (6 + 18i)$

19. $(12 + 4i) + (17 + 29i)$

20. $(5 + 2\sqrt{-16}) + (2 + 3\sqrt{-9})$