

Difficulty level: Advanced

1. Write the norm of $3 + i\sqrt{11}$.

- ☐ $2\sqrt{5}$
- ☐ $2i\sqrt{5}$
- ☐ $i\sqrt{2}$
- ☐ $\sqrt{2}$

2. Compute the norm of $14 + i\sqrt{11}$.

- ☐ $3\sqrt{23}$
- ☐ $3i\sqrt{23}$
- ☐ $\sqrt{185}$
- ☐ $i\sqrt{185}$

3. Write the norm of $18 + i\sqrt{3}$.

- ☐ $\sqrt{321}$
- ☐ $i\sqrt{321}$
- ☐ $i\sqrt{327}$
- ☐ $\sqrt{327}$

4. Write the norm of $8 + i\sqrt{3}$.

- ☐ $\sqrt{67}$
- ☐ $i\sqrt{67}$
- ☐ $i\sqrt{61}$
- ☐ $\sqrt{61}$

5. What is the norm of the complex number $4 + i\sqrt{7}$.

- ☐ $i\sqrt{23}$
- ☐ $3i$
- ☐ 3
- ☐ $\sqrt{23}$

6. What is the norm of the complex number $17 + i\sqrt{3}$.

- ☐ $\sqrt{286}$
- ☐ $2\sqrt{73}$
- ☐ $i\sqrt{286}$
- ☐ $2i\sqrt{73}$

7. Compute the norm of

$15 + i\sqrt{5}.$

☐ $i\sqrt{230}$

☐ $\sqrt{230}$

☐ $2\sqrt{55}$

☐ $2i\sqrt{55}$

8. Compute the norm of

$7 + i\sqrt{11}.$

☐ $2i\sqrt{15}$

☐ $i\sqrt{38}$

☐ $2\sqrt{15}$

☐ $\sqrt{38}$

9. Write the norm of $8 + i\sqrt{7}.$

☐ $i\sqrt{57}$

☐ $\sqrt{57}$

☐ $i\sqrt{71}$

☐ $\sqrt{71}$

10. Compute the norm of

$14 + i\sqrt{5}.$

☐ $i\sqrt{191}$

☐ $\sqrt{201}$

☐ $i\sqrt{201}$

☐ $\sqrt{191}$

11. Write the norm of $15 + i\sqrt{7}.$

☐ $i\sqrt{218}$

☐ $2\sqrt{58}$

☐ $\sqrt{218}$

☐ $2i\sqrt{58}$

12. What is the norm of the complex number $12 + i\sqrt{3}.$

☐ $7\sqrt{3}$

☐ $i\sqrt{141}$

☐ $7i\sqrt{3}$

☐ $\sqrt{141}$

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13. Compute the norm of $16 + i\sqrt{11}$.

- ☐ $\sqrt{267}$
- ☐ $7\sqrt{5}$
- ☐ $i\sqrt{267}$
- ☐ $7i\sqrt{5}$

14. What is the norm of the complex number $5 + i\sqrt{5}$.

- ☐ $2\sqrt{5}$
- ☐ $2i\sqrt{5}$
- ☐ $i\sqrt{30}$
- ☐ $\sqrt{30}$

15. Write the norm of $13 + i\sqrt{3}$.

- ☐ $\sqrt{166}$
- ☐ $i\sqrt{166}$
- ☐ $2\sqrt{43}$
- ☐ $2i\sqrt{43}$

16. Compute the norm of $9 + i\sqrt{7}$.

- ☐ $i\sqrt{74}$
- ☐ $2\sqrt{22}$
- ☐ $2i\sqrt{22}$
- ☐ $\sqrt{74}$

17. What is the norm of the complex number $17 + i\sqrt{7}$.

- ☐ $2i\sqrt{74}$
- ☐ $i\sqrt{282}$
- ☐ $\sqrt{282}$
- ☐ $2\sqrt{74}$

18. Write the norm of $15 + i\sqrt{3}$.

- ☐ $\sqrt{222}$
- ☐ $i\sqrt{222}$
- ☐ $2i\sqrt{57}$
- ☐ $2\sqrt{57}$

19. What is the norm of the complex number $10 + i\sqrt{11}$.

☐ $i\sqrt{111}$

☐ $i\sqrt{89}$

☐ $\sqrt{111}$

☐ $\sqrt{89}$

20. What is the norm of the complex number $16 + i\sqrt{3}$.

☐ $\sqrt{253}$

☐ $i\sqrt{259}$

☐ $i\sqrt{253}$

☐ $\sqrt{259}$