

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 $16 + i\sqrt{3}$.

☐ $\sqrt{253}$

☐ $i\sqrt{259}$

☐ $i\sqrt{253}$

☒ $\sqrt{259}$