

Name _____ Date _____ Period _____

12.1 – Simplifying Imaginary Numbers

Simplify the following using i .

1. $\sqrt{-8}$

2. $\sqrt{-28}$

3. $\sqrt{-54}$

4. $\sqrt{-20}$

5. $\sqrt{-27}$

6. $\sqrt{-90}$

7. $\sqrt{-99}$

8. $\sqrt{-108}$

9. $\sqrt{-128}$

10. $\sqrt{-175}$

Write the complex number in the form $a + bi$.

11. $9 + \sqrt{-300}$

12. $14 + \sqrt{-12}$

13. $\sqrt{-24} - 12$

14. $\sqrt{-45} - 40$

15. $45 + \sqrt{-98}$

16. $\sqrt{-432} + 15$

17. $\sqrt{-75} - 30$

18. $8 + \sqrt{-125}$