

Name _____ *Key* _____ Date _____ Period _____

Simplify Square Roots with Complex Numbers

Simplify the following square roots.

1. $\sqrt{162}$

$9\sqrt{2}$

2. $\sqrt{-8}$

$2i\sqrt{2}$

3. $\sqrt{192}$

$8\sqrt{3}$

4. $\sqrt{-245}$

$7i\sqrt{5}$

5. $\sqrt{3087}$

$21\sqrt{7}$

6. $\sqrt{-2028}$

$26i\sqrt{3}$

7. $\sqrt{-98}$

$7i\sqrt{2}$

8. $\sqrt{720}$

$12\sqrt{5}$

9. $\sqrt{-4704}$

$28i\sqrt{6}$

10. $\sqrt{4400}$

$20\sqrt{11}$

11. $\sqrt{867}$

$17\sqrt{3}$

12. $\sqrt{-2646}$

$21i\sqrt{6}$

13. $\sqrt{700}$

$10\sqrt{7}$

14. $\sqrt{-1922}$

$31i\sqrt{2}$

15. $\sqrt{2352}$

$28\sqrt{3}$

16. $\sqrt{-320}$

$8i\sqrt{5}$

17. $\sqrt{3328}$

$16\sqrt{13}$

18. $\sqrt{2904}$

$22\sqrt{6}$

19. $\sqrt{108}$

$6\sqrt{3}$

20. $\sqrt{1960}$

$14\sqrt{10}$