

Algebra I
Ch. 13 Practice
Simplifying Radicals

NAME: _____
DATE: _____ HOUR: _____

Simply these radicals using prime factorization. Make factor trees as necessary.

1. $\sqrt{48}$

$\sqrt{2 \cdot 2 \cdot 2 \cdot 2 \cdot 3}$

$2 \cdot 2 \sqrt{3}$

$4\sqrt{3}$

2. $\sqrt{27}$

3. $\sqrt{8}$

4. $\sqrt{108}$

5. $\sqrt{12}$

6. $\sqrt{75}$

7. $\sqrt{20}$

8. $\sqrt{162}$

9. $\sqrt{144}$

10. $\sqrt{289}$

11. $\sqrt{225}$

12. $\sqrt{196}$

13. $\sqrt{1000}$

14. $\sqrt{2000}$

15. $\sqrt{324}$

16. $\sqrt{128}$

17. $\sqrt{a^2b^3}$

18. $\sqrt{3a^2c^4}$

19. $\sqrt{13ab^3}$

20. $\sqrt{4a^2b^4}$

21. $\sqrt{9b^3c^4}$

22. $\sqrt{a^3b^3c^3}$

23. $\sqrt{7a^5c^6}$

24. $\sqrt{12a^2b^3c^5}$

over

9. $\sqrt{144}$

10. $\sqrt{289}$

11. $\sqrt{225}$

12. $\sqrt{196}$

13. $\sqrt{1000}$

14. $\sqrt{2000}$

15. $\sqrt{324}$

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