

Advanced Geometry Elearning Feb. 2016

II. Practice Problems

Simplify.

- | | |
|-------------------|---------------------|
| 1. $\sqrt{75}$ | 2. $\sqrt{20}$ |
| 3. $-\sqrt{72}$ | 4. $\sqrt{125}$ |
| 5. $\pm\sqrt{54}$ | 6. $\sqrt{192}$ |
| 7. $-\sqrt{800}$ | 8. $\sqrt{294}$ |
| 9. $\sqrt{2700}$ | 10. $-\sqrt{972}$ |
| 11. $\sqrt{2420}$ | 12. $\pm\sqrt{540}$ |
| 13. $4\sqrt{18}$ | 14. $3\sqrt{8}$ |
| 15. $5\sqrt{27}$ | 16. $7\sqrt{12}$ |
| 17. $7\sqrt{32}$ | 18. $3\sqrt{40}$ |
| 19. $11\sqrt{72}$ | 20. $9\sqrt{242}$ |

III. Challenge Problems

Reverse the process. Un-simplify the simplified radical form.
Write as one number under the radicand.

- $3\sqrt{2}$
- $-5\sqrt{6}$
- $\pm 24\sqrt{21}$

24. Find the mistake in the student's work.

$$\sqrt{14700} = \sqrt{100 \cdot 147} = 10\sqrt{147}$$

25. Given that a and b are positive write $\sqrt{a^3b^2}$ in simplified radical form.