

Unit 6

Lesson 2 - Simplifying Radicals Homework

Simplify.

1. $\sqrt[4]{80}$

2. $\sqrt[4]{48}$

3. $\sqrt[4]{112x^8y^9}$

4. $\sqrt[5]{96c^{10}d^{11}e^6}$

5. $\sqrt[3]{135m^6n^{11}}$

6. $-\sqrt[3]{72a^3b^4}$

7. $-\sqrt{45}$

8. $\sqrt{175}$

9. $\sqrt[3]{27}$

10. $\sqrt[3]{-56}$

11. $\sqrt[5]{64}$

12. $\sqrt[3]{40}$

Multiply.

13. $(-2\sqrt{7})(3\sqrt{35})$

14. $3\sqrt{15} \cdot 2\sqrt{75}$

15. $\sqrt[6]{5} \cdot \sqrt[6]{3}$

16. $\sqrt[3]{-18} \cdot \sqrt[3]{-12}$

17. $\sqrt{p^3} \cdot \sqrt{p^5}$

18. $\sqrt{2ab^2} \cdot \sqrt{8a^3b} \cdot \sqrt{3b^3c^6}$

1.
Answer: $\sqrt[4]{5}$
2.
Answer: $\sqrt[4]{3}$
3.
Answer: $x^2y^2\sqrt[4]{7y}$
4.
Answer: $2c^2d^2e\sqrt[5]{3de}$
5.
Answer: $3m^2n^3\sqrt[3]{5n^2}$
6.
Answer: $-2ab\sqrt[3]{9b}$
7.
Answer: $-3\sqrt{5}$
8.
Answer: $5\sqrt{7}$
9.
Answer: 3
10.
Answer: $-2\sqrt[3]{7}$
11.
Answer: $2\sqrt[5]{2}$
12.
Answer: $2\sqrt[3]{5}$
13.
Answer: $-42\sqrt{5}$
14.
Answer: $90\sqrt{5}$
15.
Answer: $\sqrt[6]{15}$
16.
Answer: 6
17.
Answer: p^4
18.
Answer: $4a^2b^3c^3\sqrt{3}$