

Extra Assignment - Unit 8 Lesson 3

Simplify the following expressions

1. $\sqrt{48c^3}$

2. $\sqrt{60b^4}$

3. $\sqrt{98x^5y^6}$

4. $\sqrt{25xz^3}$

5. $\sqrt{96xy^5}$

6. $\sqrt{32a^5b^6}$

7. $\sqrt{63x^2y^3}$

8. $\sqrt{24ab^2}$

9. $\sqrt{108c^8d^7}$

Add or subtract the following radicals if possible.

10. $3\sqrt{5} + 6\sqrt{5}$

11. $\sqrt{7} + 5\sqrt{7}$

12. $8\sqrt{13} + 17\sqrt{13}$

13. $5\sqrt{12} + 7\sqrt{12}$

14. $12\sqrt{25} + 6\sqrt{25}$

15. $2\sqrt{24} + \sqrt{24}$

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Extra Assignments - Unit 8 Lesson 4

Simplify the following radicals.

1. $(4\sqrt{6})(4\sqrt{6})$

2. $(\sqrt{3})(\sqrt{7})(\sqrt{3})(\sqrt{7})$

3. $(\sqrt{18})(\sqrt{3})(\sqrt{2})$

4. $(\sqrt{24})(\sqrt{6})(\sqrt{2})$

5. $(\sqrt{4})(\sqrt{6})(\sqrt{3})$

6. $(\sqrt{5})(\sqrt{35})(\sqrt{63})$

7. $(\sqrt{10})(\sqrt{5})(\sqrt{8})$

8. $(\sqrt{21})(\sqrt{7})(\sqrt{16})(\sqrt{3})$

9. $(\sqrt{15})(\sqrt{12})(\sqrt{5})(\sqrt{2})$

10. $(2\sqrt{15})(3\sqrt{3})(9\sqrt{25})$

11. $(4\sqrt{18})(2\sqrt{6})(7\sqrt{24})$

12. $(7\sqrt{5})(3\sqrt{35})(2\sqrt{42})$

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Extra Assignments - Unit 10 Lesson 4

Factor out the GCF of the following polynomials

1. $9X + 45$

2. $6P^3 - 9P^2$

3. $63X^7 - 35X^{10}$

4. $9x + 36$

5. $6n^3 - 3n^5$

6. $63x^{12} - 35x^6$

7. $12Y^3 - 21Y^2 + 28Y - 49$

8. $8x^3 - 64x^4 + x - 8$

9. $X^3 + 13X^2 - 5X - 65$

10. $9p^3 + 72p^2 + 4p + 32$

11. $12x^3 + 2x^2 - 30x - 5$

12. $4x^3 - 12x^2 - 5x + 15$

13. $24x^3 + 15x^2 - 56x - 35$

14. $36x^4y + 18x^3 + 8x^2y^2 + 4xy$

15. $42xy + 36xz - 7p^2y - 6p^2$

Solve the following quadratic equations by grouping.

16. $8r^3 - 64r^2 + r - 8$

17. $12a^3 - 21a^2 + 28a - 49$

18. $12x^3 + 2x^2 - 30x - 5$

19. $6n^3 - 16n^2 + 21n - 56$

20. $49y^3 - 28y^2 + 35y - 20$

21. $42b^3 + 36b^2 - 7b - 6$