

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

Name: \_\_\_\_\_ Date: \_\_\_\_\_

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

Name: \_\_\_\_\_ Date: \_\_\_\_\_

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

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