

Name _____

Period _____

Math 8 – Unit 9A Extra Practice

Original Score

I can calculate and simplify exponents & roots.

1. List all of the perfect squares from 1-15.

1^2			4^2			7^2			10^2					15^2

2. List all of the perfect cubes from 1-10.

	2^3			5^3				9^3	

3. Which
- two**
- numbers are BOTH perfect squares and perfect cubes?

4. $\sqrt{\frac{9}{49}}$

10. $\sqrt{\frac{100}{729}}$

5. $\sqrt[3]{\frac{-125}{216}}$

11. $\sqrt[3]{\frac{8}{27}}$

6. -4^2

12. $(-4)^2$

7. -4^3

13. $(-4)^3$

8. $\sqrt[3]{-216}$

14. $-\sqrt[3]{27}$

9. $^{-2}\sqrt{121}$

15. $\sqrt[3]{\frac{-27}{512}}$

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Math 8 – Unit 2A Extra Practice

Original Score

I can use exponent rules to simplify expressions.

Simplify each expression using exponent rules.

1. $x^4 \cdot x^8$

9. x^4x^{-8}

2. $2x^2(4x^3)$

10. $7x^2y(2x^3y^4)$

3. $\frac{8x^7}{2x^5}$

11. $\frac{x^2}{x^8}$

4. $\frac{x^9}{x^3}$

12. $\frac{12x^7}{4x}$

5. $(x^3)^4$

13. $(x^2)^{-3}$

6. 6^{-2}

14. 7^{-2}

7. x^{-8}

15. x^{-4}

8. 13^0

16. $(3x^2)^0$