Name: _____ Date: _____

Fresh Math

Rational Exponents - Medium

Simplify each expression with rational exponents.

1. $\sqrt[3]{b^5}$
2. $b^{5/2}$
3. $\sqrt{x^3}$
4. $a^{4/3}$
5. $\sqrt[3]{a^4}$
6. $x^{4/3}$
7. $\sqrt{b^3}$
8. $\sqrt{a^3}$
9. $\sqrt[3]{x^2}$
10. $\sqrt[3]{a^5}$

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Rational Exponents - Medium

Simplify each expression with rational exponents.

11. $x^{2/3}$

12. $a^{3/2}$

13. $a^{2/3}$

14. $\sqrt[3]{a^2}$

15. $x^{3/2}$

16. $\sqrt[3]{x^4}$

17. $\sqrt{b^5}$

18. $b^{2/3}$

19. $\sqrt{x^5}$

20. $a^{5/2}$

Rational Exponents - Medium - Answer Key

1. $\sqrt[3]{b^5}$

   $b^{5/3}$

2. $b^{5/2}$

   $\sqrt{b^5}$

3. $\sqrt{x^3}$

   $x^{3/2}$

4. $a^{4/3}$

   $\sqrt[3]{a^4}$

5. $\sqrt[3]{a^4}$

   $a^{4/3}$

6. $x^{4/3}$

   $\sqrt[3]{x^4}$

7. $\sqrt{b^3}$

   $b^{3/2}$

8. $\sqrt{a^3}$

   $a^{3/2}$

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Rational Exponents - Medium - Answer Key

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20. $a^{5/2}$

$\sqrt{a^5}$