Name: _____ Date: _____

Fresh Math

Exponent Properties Intro - Medium

Simplify. Write each answer as a single power.

1. $(3^8)^3$

2. $a^{17} \div a^9$

3. $(b^5)^3$

4. $(5^7)^5$

5. $b^{10} \div b^3$

6. $a^{14} \div a^5$

7. $10^{11} \div 10^4$

8. $(x^6)^3$

9. $(3^5)^4$

10. $(y^3)^5$

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Fresh Math

Exponent Properties Intro - Medium

Simplify. Write each answer as a single power.

11. $y^9 \div y^3$

12. $(7^4)^4$

13. $(n^6)^2$

14. $(n^2)^2$

15. $(n^5)^4$

16. $(10^2)^6$

17. $m^8 \div m$

18. $m^{10} \div m^3$

19. $(a^7)^3$

20. $3^6 \div 3^5$

Exponent Properties Intro - Medium - Answer Key

1. $(3^{8})^{3}$
   3^{24}

2. $a^{17} \div a^{9}$
   a^{8}

3. $(b^{5})^{3}$
   b^{15}

4. $(5^{7})^{5}$
   5^{35}

5. $b^{10} \div b^{3}$
   b^{7}

6. $a^{14} \div a^{5}$
   a^{9}

7. $10^{11} \div 10^{4}$
   10^{7}

8. $(x^{6})^{3}$
   x^{18}

9. $(3^{5})^{4}$
   3^{20}

10. $(y^{3})^{5}$
    y^{15}

Exponent Properties Intro - Medium - Answer Key

11. $y^9 \div y^3$

y^6

12. $(7^4)^4$

7^{16}

13. $(n^6)^2$

n^{12}

14. $(n^2)^2$

n^4

15. $(n^5)^4$

n^{20}

16. $(10^2)^6$

10^{12}

17. $m^8 \div m$

m^7

18. $m^{10} \div m^3$

m^7

19. $(a^7)^3$

a^{21}

20. $3^6 \div 3^5$

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