

Unit 1 – Quiz 1 Review – Properties of Exponents**Name:****Using the Properties of Exponents, evaluate the following:**

1. p^0

2. $(3a^{2/3})^2$

3. p^{-5}

4. $d^{3/2} \cdot d^{3/4}$

5. k^4h^{-5}

6. $\frac{m^{12}}{m^9}$

7. $8^5 \cdot 8^6$

8. $(x^3)^3$

9. $\frac{x^7}{x^{11}}$

10. $(p^5n^5)^{3/2}$

11. $(x^{4/3})^5$

12. $\frac{x^{1/4}}{x^{2/5}}$

Rewrite the following in Rational Exponent Notation:

13. $(\sqrt{x})^5$

14. $\sqrt[3]{81}$

15. $(\sqrt[4]{64})^3$

Rewrite the following in Radical Notation:

16. $7^{1/4}$

17. $5^{3/7}$

18. $2^{4/3}$

Simplify the following:

19. $\sqrt{9x} \cdot \sqrt{2y}$

20. $\sqrt{24}$

21. $\sqrt{32}$

22. $\frac{\sqrt[4]{24x^{15}}}{\sqrt[4]{4x^2}}$

23. $\sqrt[4]{15a^{16}b^{24}}$

24. $\sqrt[3]{27a^{33}b^{18}}$