10.1-10.4 Review

Review

1) $b^3 \bullet b^2$

2) $g^7 \bullet g^9$

3) $7^4 \bullet 7^5$

4) $\left(\frac{7}{8}\right) \bullet \left(\frac{7}{8}\right)^4$

5) $j \bullet j^2 \bullet j^3$

The Product of Powers Property:

To multiply powers with the same base _____

_____.

...with coefficients

6) $(7n^6)(3n^5)$

7) $(-6x^2y^4)(4x^5y)$

Let' see...

8) $(7^2)^3$

9) $\left[\left(\frac{2}{3}\right)^2\right]^4$

10) $(h^3)^4$

11) $\left[(-5)^4\right]^6$

The Power of Powers Property:

To find a power of a power _____ .

Let' see...

12) $(4d^5)^3$

13) $(-2x^4y^2)^3$

14) $(-5m^3)^2$

The Power of Products Property:

_____

_____ .

The Quotient of Powers Property:

_____base & _____ the exponents.

15) $\frac{n^{24}}{n^{16}}$

16) $\frac{1}{x^5} \bullet x^8$

17) $\frac{1}{(-7)^4} \bullet (-7)^{11}$

18) $\frac{x^3y}{x^2}$

RULES:

- ANY number to the zero power equals _____.
- a^{-n} is the _____ of a^n.

Evaluate

19) 5^{-2}

20) 75^0

21) $(-56)^0$

22) $\left(\frac{2}{5}\right)^{-3}$

23) $\frac{1}{3^{-4}}$

24) $(-3)^{-3}$

Math 8: 10.1-10.4 Review for Quiz

Write the product in Exponential form.

1. $(-\frac{1}{4}) \bullet (-\frac{1}{4}) \bullet x \bullet (-\frac{1}{4}) \bullet x$

= _____

2. $a \bullet b \bullet a \bullet b \bullet b \bullet c$

= _____

Simplify the expression. Write your answer as a power.

3. $(-2)^2 \bullet (-2) =$ _____

4. $(s^5)^4 =$ _____

5. $\frac{6^6}{6^3} =$ _____

6. $\frac{6^6 \bullet 6^4}{6^3} =$ _____

Evaluate the expression.

7. $(-1)^4 =$ _____

8. $-1^4 =$ _____

9. $\frac{2^{12}}{2^{14}} =$ _____

10. $\left(-\frac{1}{8}\right)^{20}\left(-\frac{1}{8}\right)^{-20} =$ _____

11. $\left(4^2 - 6^2\right) =$ _____

Simplify the expression.

12. $(-3a)^3 =$ _____

13. $\frac{(x^3)^5}{(x^{10})(x^5)} =$ _____

14. $\frac{2}{2^6} \bullet \frac{2^{10}}{2^4} =$ _____

Simplify. Write the expression using only positive exponents

15. $w^{-13}w^{10} =$ _____

16. $\frac{5a^5}{25a^7} =$ _____

17. $[2^{-2} \bullet 3^{-3}]^0 =$ _____

18. $4b^3 \bullet 3b^{-4} =$ _____

19. $\frac{40r^{-5}}{8r} =$ _____