

SEMESTER 2 FINAL

CHAPTER 10

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's 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.

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

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

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

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

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

Practice

Simplify

25) $3f^{-4}$

26) $(3f)^{-4}$

27) $\frac{a^{-7}}{b^4}$

28) $\frac{m^6}{n^{-7}}$

Practice

Simplify

$$29) \frac{c^{-2}}{d^{-3}}$$

$$30) 6x^{-2}yz^{-4}$$