

Welcome Back!

You have 3min to complete Opening Checklist.

Do Now (10 points) – Copy the Objective and define the Word of the Day.

Obj: IWBAT multiply powers and raise powers to a power.

Word of the Day & Defn: Power: the part of a term that is the base and its exponent



/10

Skill Review (10 points) – Show ALL work necessary.

Expand the power (write as multiplication).

1) 6^2 2) 7^4 3) 5^5x^3

Write the multiplication as an exponent.

4) $y \cdot y \cdot y \cdot y \cdot y$ 5) $7 \cdot 7 \cdot 7 \cdot w \cdot w$

/10

Grading Tracker

Name _____ Pd _____ Quarter _____

	Date	Section	Topic (from objective)	CW %	ET %	Q %	T %
1							
2							
3							
4							
5							

Come to tutoring to get your Test %.

Answer these questions on the back:

What is 1 action that helped your grade on this test? Why?

What is 1 action that hurt your grade on this test? Why?

- Write the date from your graded Path to Success.
- Write the section from your graded Path to Success.
- Write the topic from the whiteboard.
- Write the % you earned overall for this classwork.
- Write the % you earned on your exit ticket.
- The Q% and T% columns will wait.
- Keep your Grading Tracker and your graded Path to Success in your folder.

Exponent Properties

Your Name

Vocabulary

Product of Powers

Power of a Power

Quotient of Powers

Zero and Negative Exponents

base: # or variable right
before the exponent

exponent: Little # to the top right of the base; tells how many times to
multiply the base by itself

coefficient: Big # to the left of the whole power; numerical factor of the term

Vocabulary

Product of Powers

Power of a Power

Quotient of Powers

Zero & Negative Exponents

Multiplying Powers

Same base → Add exponents

Multiply coefficients

Why It Works

Examples

1)

2)

Product of Powers

Power of a Power

Quotient of Powers

Zero & Negative Exponents

Power Rule

Distribute the exponent to EVERY part of the base.

If the base already has an exponent, MULTIPLY the exponents.

Why It Works

Examples

1)

2)

3)

4)

Power of a Power

Quotient of Powers

Zero & Negative Exponents

Simplify.

1) $2n^4 \cdot 5n^4$

2) $6r^{-2} \cdot 5r^{-6}$

3) $6k^2 \cdot k$

4) $4n^4 \cdot 2n^{-3}$

5) $2y^2 \cdot 3x$

6) $6x \cdot 2x^2$

7) $7v^3 \cdot 10u^3v^5 \cdot 8uv^3$

8) $9xy^2 \cdot 9x^5y^2 \cdot 2x^{-2}$

9) $6m^3n^3 \cdot 8m^2n^3$

10) $(2x^2)^2$

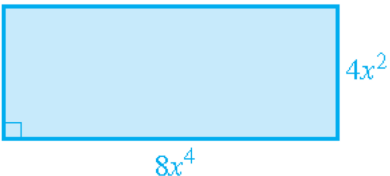
11) $(p^4)^4$

12) $\left(\frac{k}{7}\right)^2$

13) $\left(\frac{3b^4}{9a^2}\right)^5$

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

15) $(4xy^2)^3(x^2y)^4$

16) Write an expression for the area of the rectangle (recall formula $A = LW$).

Complete the problems on the back of your PtS.

****Ask your group for help before you ask me.**

****Level 1 or 2 voice.**

When you finish, **SHOW ME** to get your computer to work on IXL.

Exit Ticket

- SILENTLY (Level 0) and INDEPENDENTLY answer these questions on the bottom of the front of your Path to Success.
- You don't need to copy the questions, just write the numbers and your answers.

Exit Ticket (10 points) – Complete INDEPENDENTLY and SILENTLY.

Initials

Simplify.

1) $7u^2v^5 \cdot 9uv^3$

2) $(4a^3)^2$

/10