Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table# \_\_\_ Period \_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_

**10.2A Product of Powers Property\_Classwork**

Objective: CCSS.8.EE.1 (MP8 Look for and Express Regularity in Repeated Reasoning)

HW: 10.2A HW

|  |
| --- |
| **WARM-UP**EXAMPLE: Write the prime factorizationWrite the prime factorization of 675 of 648 using exponents using exponents 648 2 ^ 324 2 ^ 162 2 ^ 81 9 ^ 9 3 ^ 3 3 ^ 3PRIME FACTORIZATION: 23 ∙ 34 |

1. Write the expression as a single power. Then write a *general rule* for finding **a product of power**.



* am ∙ an =
* Describe the pattern in the table.

**BACK 🡪**

1. Write the expression as a single power. Then write a *general rule* for finding **a power of a power**.

 

* (am)n =
* Describe the pattern.
1. Write the expression as the product of two powers. Then write a *general rule* for finding **a power of a product.**



* (a ∙ b)m =
* Describe the pattern.