## Lesson 7: Negative Exponents

* Let’s explore numbers with negative exponents.

### 7.1: Math Talk: Powers of Ten

Solve each equation mentally:

### 7.2: Maintain the Pattern

Complete the table.

|  |  |  |  |
| --- | --- | --- | --- |
|  | exponential form | number form | calculations |
|  |  |  |  |
|  |  | 16 |  |
|  |  |  |  |
|  |  | 4 |  |
|  |  | 2 |  |
|  |  | 1 |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

### 7.3: Matching Equal Expressions

Take turns with your partner to match the original expression with an equal or equivalent expression in the list.

* For each match that you find, explain to your partner how you know it’s a match.
* For each match that your partner finds, listen carefully to their explanation. If you disagree, discuss your thinking and work to reach an agreement.

Which expressions equal ?

* 1
* 0

Which expressions equal ?



Which expressions equal ?



Which expressions are equivalent to ?





© CC BY 2019 by Illustrative Mathematics®