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| **Which is Greater?- 6.EE.1** | |
| **Domain** | **Expressions and Equations** |
| **Cluster** | **Apply and extend previous understandings of numbers to the system of rational numbers.** |
| **Standard(s)** | **6.EE.1** Write and evaluate numerical expressions involving whole-number exponents. |
| **Materials** | Activity sheet |
| **Task** | **Which is Greater?**  Part 1:  34 or 43 ? Explain how you know.  Part 2:  72 or 27 ? Explain how you know.  Part 3:  103 or 310 ? Explain how you know. |

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| **Rubric** | | |
| **Level I** | 1. **Level II** | **Level III** |
| Developing Proficiency   * Student uses inappropriate solution strategy and does not get the correct answer. | Not Yet Proficient   * There are one or two errors. | Proficient in Performance   * Accurately solves problem and gives clear and accurate explanations. * Part 1: 34 = 81 and 43= 64. * Part 2: 72= 49 and 27= 128 * Part 3:103= 1,000 and 310= 59,049 |

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| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| 3. Constructs viable arguments and critiques the reasoning of others. |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

**Which is Greater?**

Part 1:

34 or 43 ? Explain how you know.

Part 2:

72 or 27 ? Explain how you know.

Part 3:

103 or 310 ? Explain how you know.