Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table #: \_\_\_\_\_\_\_\_\_ Per: \_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_

**10.1A Basic Exponents\_Classwork**

*Objective: write expressions using integer exponents; evaluate expressions involving integer exponents CC.SS.8.EE.1*

*Students will be able to make sense of problems and persevere in solving them (MP1).*

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| --- | --- | --- | --- | --- |
| **Warm Up:**1. For the expression $6^{3}$, identify the power, base and exponent. $6^{3}$ POWER = \_\_\_\_\_\_\_ BASE = \_\_\_\_\_\_\_\_ EXPONENT = \_\_\_\_\_\_\_\_2. Evaluate (solve) each problem.

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| --- | --- | --- | --- |
| a. $-5^{2}$ | b. $(-5)^{2}$ | c. $1-5^{2}$ | d. $1+(-5)^{2}$ |

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| **QUESTION**Does -42 = 42 = (-4)2 = - (42)?  |
| **CLAIM** (Your answer): all 4 expressions **are equal are not equal** (circle one) |
| **EVIDENCE** (Show your work below and then indicate which expressions are equivalent. HINT: Evaluate each expression. Indicate which ones are equivalent and which ones are not equivalent. Explain how you know this.)

|  |  |  |  |
| --- | --- | --- | --- |
| -42 | 42 | (-4)2 | - (42) |
|  |  |  |  |

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| **REASONING** (Summarize your findings in a few complete sentences that prove your solutions. Include how the negative and parenthesis play a role in the final answer.) |