

Name _____

Everyday Powers Answer Key

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| 1) Repeated multiplication: 6×6
Exponent expression: 6^2
Value: 36 | 5) Repeated multiplication: $3 \times 3 \times 3$
Exponent expression: 3^3
Value: 27 |
| 2) Repeated multiplication: $4 \times 4 \times 4$
Exponent expression: 4^3
Value: 64 | 6) Repeated multiplication: 5×5
Exponent expression: 5^2
Value: 25 |
| 3) Repeated multiplication: $2 \times 2 \times 2 \times 2 \times 2$
Exponent expression: 2^5
Value: 32 | 7) Repeated multiplication: 7×7
Exponent expression: 7^2
Value: 49 |
| 4) Repeated multiplication: 9×9
Exponent expression: 9^2
Value: 81 | 8) Repeated multiplication: $2 \times 2 \times 2 \times 2$
Exponent expression: 2^4
Value: 16 |

Teacher's Guide

- Review that square situations often use the base twice, while cube situations use the base three times.
- Encourage students to identify the repeated factor before writing the exponent expression.
- Remind students to write the repeated multiplication first, then convert it to exponent form before finding the value.
- Differentiate by allowing students who need support to draw simple models such as arrays or cube sketches.
- Increase engagement by asking students to identify which situations represent squares, cubes, or repeated doubling before solving.
- Extend learning by having students create their own real-life scenario that can be represented with an exponent expression.
- Reinforce that exponents are a shorthand for repeated multiplication and help represent patterns more efficiently.