

Practice: Work With Exponents

- What is the base of each power?
 - 5^2
 - 2^3
 - $(-3)^4$
 - -3^4
 - $\left(\frac{2}{3}\right)^2$
 - 2.1^2
- Write the exponent for each power in question 1.
- Which expressions are equal to $4 \times 4 \times 4$?
 - 3^4
 - 4^3
 - 12
 - 64
- Which expression in question 3 is $4 \times 4 \times 4$ written as a power?
- Which expressions are equal to 2^4 ?
 - 2×4
 - 4×4
 - $2 \times 2 \times 2 \times 2$
 - 16
- Which expression in question 5 is 2^4 written in expanded form?
- Write each expression as a power.
 - $6 \times 6 \times 6 \times 6 \times 6 \times 6 \times 6$
 - 9×9
 - $0.4 \times 0.4 \times 0.4$
 - $(-7) \times (-7) \times (-7) \times (-7) \times (-7)$
 - $(-1.3) \times (-1.3) \times (-1.3) \times (-1.3)$
 - $\left(\frac{2}{5}\right) \times \left(\frac{2}{5}\right) \times \left(\frac{2}{5}\right) \times \left(\frac{2}{5}\right)$
- Write each power in expanded form, then evaluate.
 - 3^4
 - 5^3
 - $(-2)^2$
 - -3^4
 - $\left(\frac{1}{4}\right)^2$
 - 0.4^3
- Evaluate.
 - 6^3
 - 2^7
 - -4^2
 - $(-2)^6$
 - 1^{12}
 - $\left(-\frac{4}{5}\right)^2$
- Use the correct order of operations to evaluate each expression.
 - $2^4 + 3^2$
 - $6^3 - 6$
 - $(2 + 5)^2$
 - $(2^2 + 5^2)$
 - $6\left(\frac{1}{3}\right)^2$
 - $8^2 \div 2^4$
- Evaluate each expression for the given values of the variables.
 - $3x^4$ $x = 2$
 - $2x^2 + 5$ $x = 3$
 - $4r^2 - r$ $r = 6$
 - $t^2 - 2t$ $t = 4$
 - $m^2 + m - 4$ $m = 3$
 - $x^2 - y^2$ $x = 7, y = 5$