EVALUATING EXPRESSIONS HAVING EXPONENTS

- An exponent indicates how many times to multiply the number by itself:

15^2 25^3 8^4 10^5

- Evaluating an expression containing a number with an exponent means to write the repeated multiplication form and perform the operation.

$15^2 = 15 \times 15 = 225$

$25^3 = 25 \times 25 \times 25 = 15{,}625$

$8^4 = 8 \times 8 \times 8 \times 8 = 4096$

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How to eva

- Change ultiplication form:

$12^2 = 12 \times 12$

- Perform the repeated multiplication operation:

$12^2 = 12 \times 12 = 144$

- If the number with the exponent is in a 2-step problem, evaluate the exponent first and then perform the other operations:

$12^2 + 5 = (12 \times 12) + 5 = 144 + 5 = 149$

Try This!

11^2_____

32^2_____

10^3_____

$8^2 + 5$_____

$2^4 - 8$_____