EVALUATING EXPRESSIONS HAVING EXPONENTS

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

$$15^2 \qquad 25^3 \qquad 8^4 \qquad 10^5$$

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

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

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

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

- 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 + _____

2^4 - 8 _____