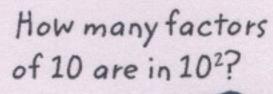
Numerical Expressions with Exponents

Solve the problems.

- What is the value of 0.9 10²?
 - A 0.09
 - B 0.9
 - C 9
 - D 90





2 Look at the expression.

$$4 \cdot (12 - 8) + 2^3$$

Tell whether each statement about the expression is *True* or *False*.

- the expression is to simplify 2³.

 The value of 2³ is 6

 True

 False
- b. The value of 2³ is 6.
 c. The first step in evaluating the expression is to subtract 12 8.
 d. True False
 False
 False
 False

What does the order of operations tell you?



Beth is making a beanbag seat in the shape of a cube. Each side of the seat is 2 feet long. Beth needs to find the volume of the seat so that she can buy the correct amount of beans. Beans are sold in bags that hold 2 cubic feet of beans. How many bags of beans should Beth buy?

Show your work.

How do you find the volume of a cube?



Solution: _____

Solve.

Which expression shows the first step in evaluating

$$2+7\cdot\frac{12}{6}-3^{2}$$
?

A
$$2 + \frac{84}{6} - 3^2$$

B
$$9 \cdot \frac{12}{6} - 3^2$$

$$c + 7 \cdot \frac{12}{6} - 9$$

D
$$2 + 7 \cdot 2 - 3^2$$

What operation is done first in the order of operations?



Students at a cooking school made a supersized rectangular pizza for a class party. Lupita cut the pizza into 3 equal pieces. Then she cut each piece into 3 equal parts two more times. Lupita needs 27 pieces of pizza. Does she have enough pieces yet? Explain how you know.

How can you use exponents to help you solve this problem?

Students are getting signatures for a petition to increase sports activities at the community center. The number of signatures they get each day is 3 times as many as the day before. The expression 36 represents the number of signatures they got on the sixth day. How many signatures did they get on the first day?

What do the base and the exponent represent?



Betsy chose **B** as the correct answer. How did she get that answer?