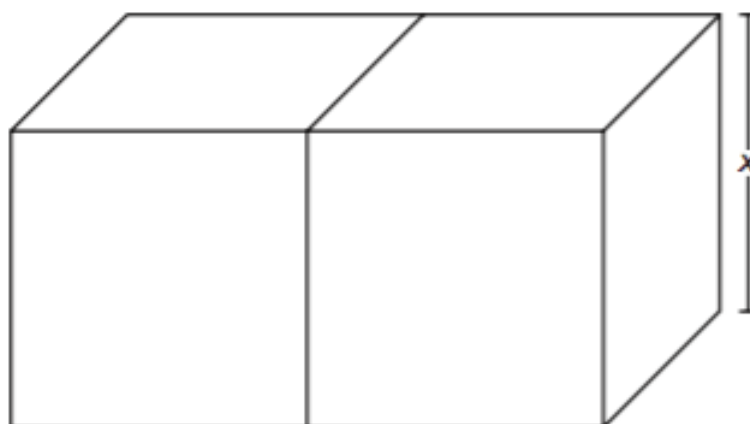


Area/Perimeter/Volume

**31** The measure of an obtuse angle is represented by  $(9x + 27)^\circ$ . Which is not a possible value for  $x$ ?

- A** 7.1
- B** 12.3
- C** 16.9
- D** 6.8

**44** The volume of two identical cubes is related to the edge length of the cubes.



Which function represents the combined volume of these cubes?

- F**  $y = 2x^3$
- G**  $y = x^3$
- H**  $y = 8x^3$
- J**  $y = 2x^2$

## Area/Perimeter/Volume

**12** A rectangular prism has a width of  $x$  inches, a length of  $x^2y$  inches, and a height of  $y^2$  inches. Which expression represents the volume in cubic inches of this rectangular prism?

**F**  $4x^2y^2$

**G**  $4x^3y^3$

**H**  $x^2y^2$

**J**  $x^3y^3$

**6** The perimeter of a rectangle is 42 centimeters. The length of the rectangle can be represented by  $(x + 4)$ , and its width can be represented by  $(2x - 7)$ . What are the dimensions of this rectangle in centimeters?

**F** Length = 10 and width = 11

**G** Length = 8 and width = 13

**H** Length = 6 and width = 15

**J** Length = 12 and width = 9

**34** The mass of a substance varies directly with the volume of the substance. The volume of 100 kilograms of the substance is 80 liters. What is the volume, in liters, of 3.2 kilograms of this substance?

Record your answer and fill in the bubbles on your answer document.

## Area/Perimeter/Volume