

Using Equations to Solve Word Problems

A drink container is shaped like a cylinder. The height of the container is 10 centimeters, and the radius of the container is 6 centimeters. What is the approximate volume of the container? (Use 3.14 for π .)

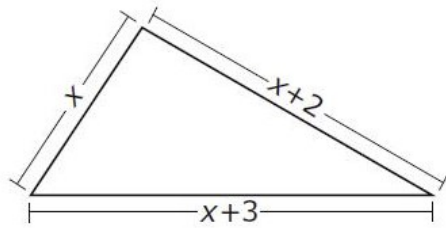
$$V = \pi r^2 h$$

The formula below can be used to convert the temperature in degrees Celsius ($^{\circ}\text{C}$) to the temperature in degrees Fahrenheit ($^{\circ}\text{F}$).

$$F = \frac{9}{5}C + 32$$

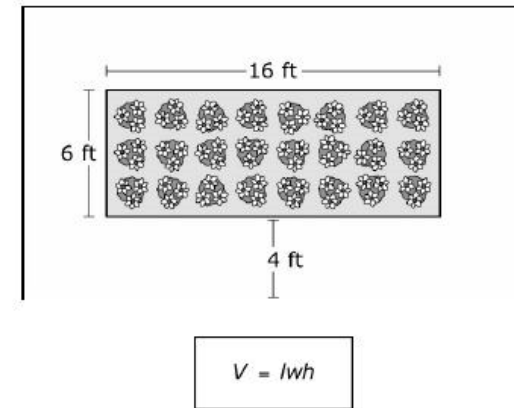
What is 15° Celsius in degrees Fahrenheit?

The perimeter of the triangle below is 23 centimeters.



What is the length, in centimeters, of the shortest side?

A rectangular garden with a 4-foot wide cement sidewalk is shown. The cement for the sidewalk is $\frac{1}{2}$ foot deep.



What volume of cement is needed for the sidewalk?