

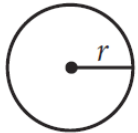


**Titan Learning Center  
Mathematics SAT Prep  
Week 5 Set B**



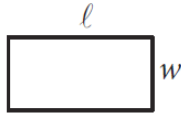
**CALCULATOR ALLOWED – Open Answer**

**REFERENCE** (This reference sheet is given on the SAT!)

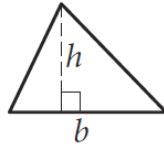


$$A = \pi r^2$$

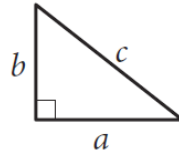
$$C = 2\pi r$$



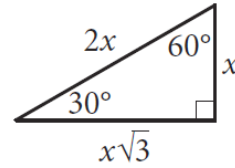
$$A = \ell w$$



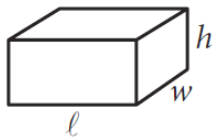
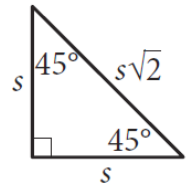
$$A = \frac{1}{2}bh$$



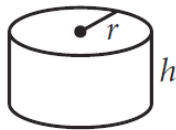
$$c^2 = a^2 + b^2$$



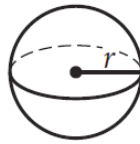
Special Right Triangles



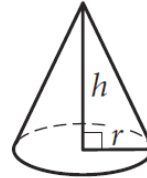
$$V = \ell wh$$



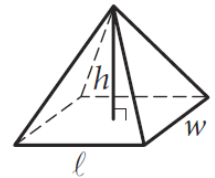
$$V = \pi r^2 h$$



$$V = \frac{4}{3}\pi r^3$$



$$V = \frac{1}{3}\pi r^2 h$$



$$V = \frac{1}{3}\ell wh$$

The number of degrees of arc in a circle is 360.

The number of radians of arc in a circle is  $2\pi$ .

The sum of the measures in degrees of the angles of a triangle is 180.

**31**

There are two atoms of hydrogen and one atom of oxygen in one molecule of water. How many atoms of hydrogen are there in 51 molecules of water?

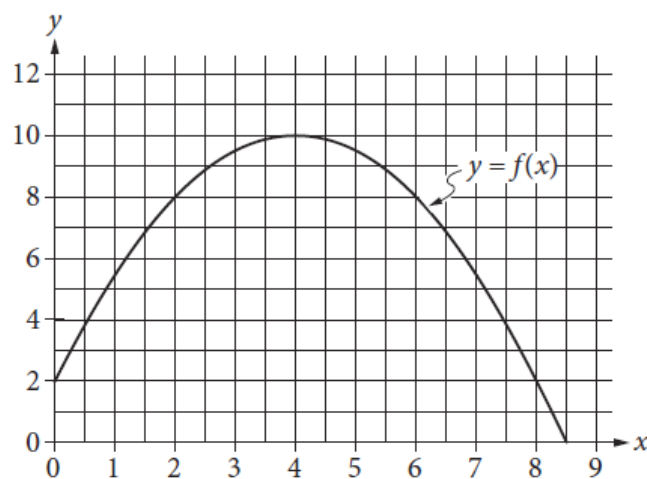
**32**

$$x - \frac{1}{2}a = 0$$

If  $x = 1$  in the equation above, what is the value of  $a$  ?

In the  $xy$ -plane, the equations  $x + 2y = 10$  and  $3x + 6y = c$  represent the same line for some constant  $c$ . What is the value of  $c$ ?

On April 18, 1775, Paul Revere set off on his midnight ride from Charlestown to Lexington. If he had ridden straight to Lexington without stopping, he would have traveled 11 miles in 26 minutes. In such a ride, what would the average speed of his horse have been, to the nearest tenth of a mile per hour?



The graph of the function  $f$ , defined by

$$f(x) = -\frac{1}{2}(x - 4)^2 + 10, \text{ is shown in the } xy\text{-plane}$$

above. If the function  $g$  (not shown) is defined by

$$g(x) = -x + 10, \text{ what is one possible value of } a \text{ such}$$

that  $f(a) = g(a)$ ?

**TLC Stamp**

