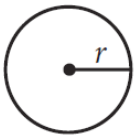
Name: _____ Teacher: _____ Block: _____

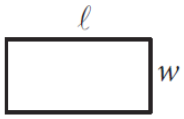
Titan Learning Center
Mathematics SAT Prep
Week 7 Set B

CALCULATOR ALLOWED* – *Multiple Choice

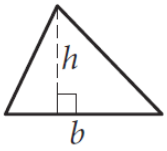
REFERENCE *(This reference sheet is given on the SAT!)*



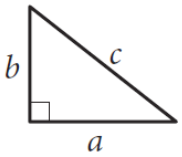
$A = \pi r^2$
$C = 2\pi r$



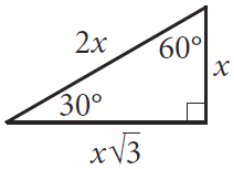
$A = \ell w$

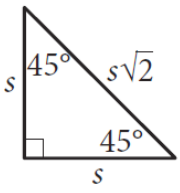


$A = \frac{1}{2}bh$

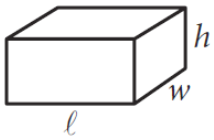


$c^2 = a^2 + b^2$

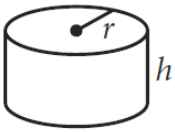




Special Right Triangles

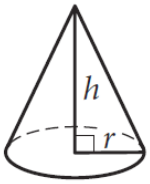


$V = \ell wh$

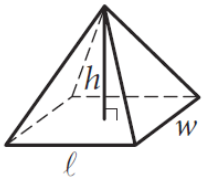


$V = \pi r^2 h$

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



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



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

The number of degrees of arc in a circle is 360.
The number of radians of arc in a circle is 2π.
The sum of the measures in degrees of the angles of a triangle is 180.

6

In the xy-plane, the graph of which of the following equations is a line with a slope of 3 ?

A) $y = \frac{1}{3}x$

B) $y = x - 3$

C) $y = 3x + 2$

D) $y = 6x + 3$

7

$$x + 1 = \frac{2}{x + 1}$$

In the equation above, which of the following is a possible value of $x + 1$?

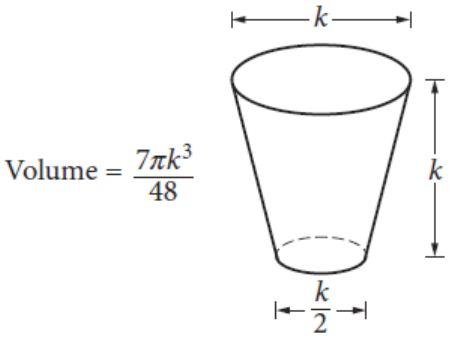
A) $1 - \sqrt{2}$

B) $\sqrt{2}$

C) 2

D) 4

Questions 8-10 refer to the following information.



The glass pictured above can hold a maximum volume of 473 cubic centimeters, which is approximately 16 fluid ounces.

8

What is the value of k, in centimeters?

A) 2.52
B) 7.67
C) 7.79
D) 10.11

9

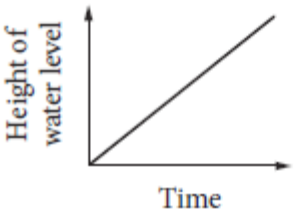
Jenny has a pitcher that contains 1 gallon of water. How many times could Jenny completely fill the glass with 1 gallon of water? (1 gallon = 128 fluid ounces)

A) 16
B) 8
C) 4
D) 3

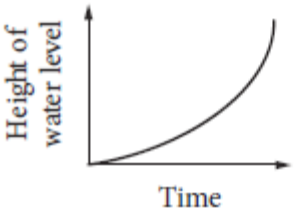
10

Water pours into the glass slowly and at a constant rate. Which of the following graphs best illustrates the height of the water level in the glass as it fills?

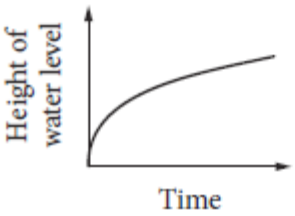
A)



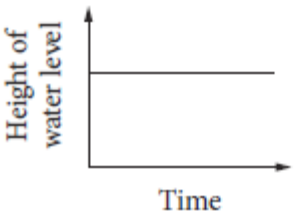
B)



C)



D)



TLC Stamp