

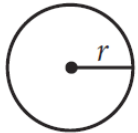


**Titan Learning Center
Mathematics SAT Prep
Week 2 Set B**



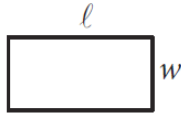
CALCULATOR ALLOWED – Multiple Choice

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

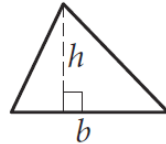


$$A = \pi r^2$$

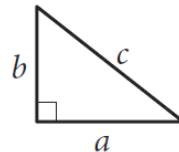
$$C = 2\pi r$$



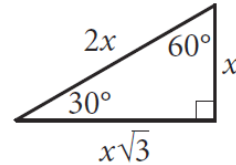
$$A = \ell w$$



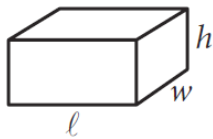
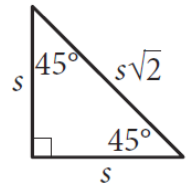
$$A = \frac{1}{2}bh$$



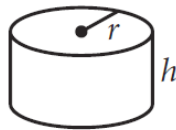
$$c^2 = a^2 + b^2$$



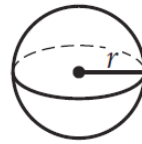
Special Right Triangles



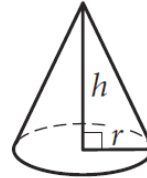
$$V = \ell wh$$



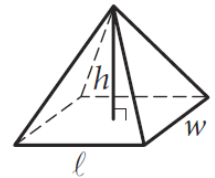
$$V = \pi r^2 h$$



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



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



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

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

$$\sqrt{2x+6} + 4 = x + 3$$

What is the solution set of the equation above?

- A) $\{-1\}$
- B) $\{5\}$
- C) $\{-1, 5\}$
- D) $\{0, -1, 5\}$

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A group of 202 people went on an overnight camping trip, taking 60 tents with them. Some of the tents held 2 people each, and the rest held 4 people each. Assuming all the tents were filled to capacity and every person got to sleep in a tent, exactly how many of the tents were 2-person tents?

- A) 30
- B) 20
- C) 19
- D) 18

$$f(x) = x^3 - 9x$$

$$g(x) = x^2 - 2x - 3$$

Which of the following expressions is equivalent to

$$\frac{f(x)}{g(x)}, \text{ for } x > 3 ?$$

- A) $\frac{1}{x+1}$
- B) $\frac{x+3}{x+1}$
- C) $\frac{x(x-3)}{x+1}$
- D) $\frac{x(x+3)}{x+1}$

$$(x-6)^2 + (y+5)^2 = 16$$

In the xy -plane, the graph of the equation above is a circle. Point P is on the circle and has coordinates $(10, -5)$. If \overline{PQ} is a diameter of the circle, what are the coordinates of point Q ?

- A) $(2, -5)$
- B) $(6, -1)$
- C) $(6, -5)$
- D) $(6, -9)$

$$y > 2x - 1$$

$$2x > 5$$

Which of the following consists of the y -coordinates of all the points that satisfy the system of inequalities above?

- A) $y > 6$
- B) $y > 4$
- C) $y > \frac{5}{2}$
- D) $y > \frac{3}{2}$

TLC Stamp

