

**Geometry**  
**Daily Quiz 10042019**

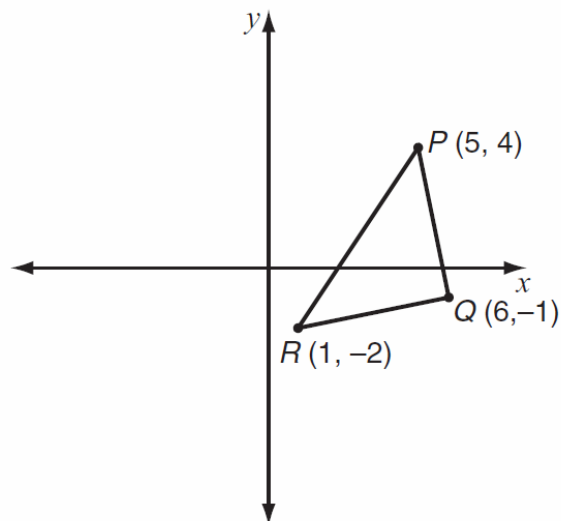
**Question 1.**

The diameter of circle  $P$  is  $RT$ . The center of the circle,  $P$ , has coordinates  $(-4, 1)$ . The coordinates of point  $R$  are  $(2, -3)$ . What are the coordinates of point  $T$ ?

- A.  $(-12, 8)$
- B.  $(-10, 5)$
- C.  $(-6, 4)$
- D.  $(-1, -1)$

**Question 2.**

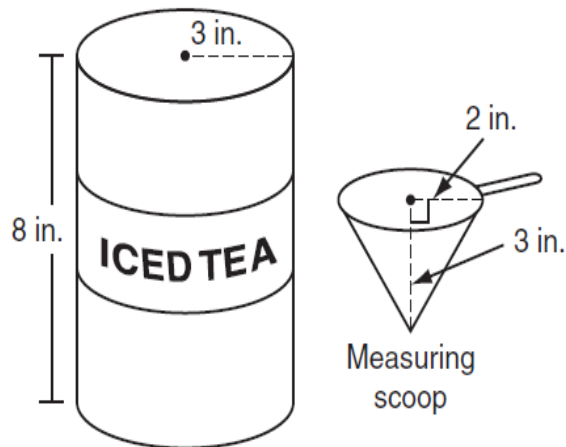
Look at  $\triangle PQR$ .



What are the coordinates of the midpoint of  $\overline{RP}$ ?

Question 3. See reference sheet at the end of the test for formula

This diagram shows a cylindrical container of iced tea mix and a cone-shaped measuring scoop.



One level measuring scoop of iced tea mix makes one pitcher of iced tea. How many pitchers of iced tea can be made from this full container of iced tea mix? Show your work or explain how you know.

Question 4.

What are the coordinates of the image of point  $P(-3, -7)$  after a reflection about the line  $y = 2$ ?

- A.  $(-3, 9)$
- B.  $(-3, 11)$
- C.  $(5, -7)$
- D.  $(7, -7)$

**Question 5.**

A square with a side length of 8.0 cm is rolled up, without overlap, to form the lateral surface of a cylinder. What is the radius of the cylinder to the nearest tenth of a centimeter?

**Question 6.**

Square  $WXYZ$  is plotted on a coordinate grid.

- Vertex  $X$  is located at  $(6, 8)$ .
- The midpoint of the diagonals of  $WXYZ$  is located at  $(3, 5)$ .

Which coordinate pair represents the location of another vertex of square  $WXYZ$ ?

- A.  $(0, 2)$
- B.  $(3, 2)$
- C.  $(6, 1)$
- D.  $(8, 0)$

Question 7.

This diagram represents a tower. The tower is in the shape of a cone on top of a cylinder.



Which measurement is closest to the total volume of the tower?

- A. 2,200 cubic meters
- B. 2,600 cubic meters
- C. 9,400 cubic meters
- D. 10,500 cubic meters

**Question 8.**

Circle  $C$  has its center at the coordinates  $(3, 8)$ . The coordinates of one point on the circle are  $(-1, 6)$ . What are the coordinates of another point on the circle?

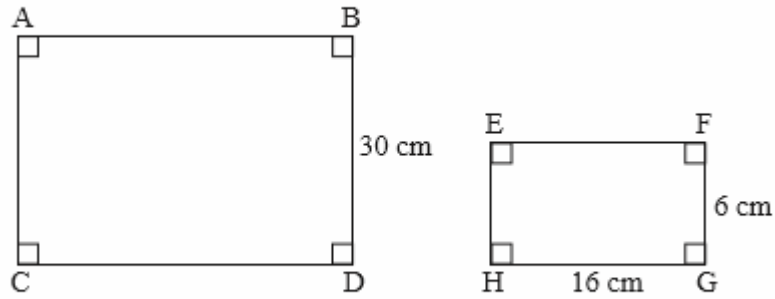
- A.  $(-1, 5)$
- B.  $(0, 0)$
- C.  $(5, 4)$
- D.  $(6, -1)$

**Question 9.**

Sketch a right triangle in which  $\tan \theta = \frac{5}{12}$ , where  $\theta$  represents the measure of an angle of the triangle. Be sure to label  $\theta$  and the right angle in your sketch.

**Question 10.**

The following diagram shows two similar rectangles:



Determine the length of the side C D.

- a.  $CD =$
  
- b. What is the ratio of the perimeter of ABDC to the perimeter of EFGH?.....
  
- c. What is the ratio of the area of ABDC to the area of EFGH?.....

**Take note of c and d above. You will need this knowledge soon!**



### High School Mathematics Assessment Reference Sheet

1 inch = 2.54 centimeters	1 kilometer = 0.62 mile	1 cup = 8 fluid ounces
1 meter = 39.37 inches	1 pound = 16 ounces	1 pint = 2 cups
1 mile = 5280 feet	1 pound = 0.454 kilograms	1 quart = 2 pints
1 mile = 1760 yards	1 kilogram = 2.2 pounds	1 gallon = 4 quarts
1 mile = 1.609 kilometers	1 ton = 2000 pounds	1 gallon = 3.785 liters
		1 liter = 0.264 gallons
		1 liter = 1000 cubic centimeters

Triangle	$A = \frac{1}{2}bh$
Parallelogram	$A = bh$
Circle	$A = \pi r^2$
Circle	$C = \pi d$ or $C = 2\pi r$
General Prisms	$V = Bh$
Cylinder	$V = \pi r^2 h$
Sphere	$V = \frac{4}{3}\pi r^3$
Cone	$V = \frac{1}{3}\pi r^2 h$
Pyramid	$V = \frac{1}{3}Bh$

Quadratic Formula	$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$
Arithmetic Sequence	$a_n = a_1 + (n - 1)d$
Geometric Sequence	$a_n = a_1 r^{n-1}$
Geometric Series	$S_n = \frac{a_1 - a_n r^n}{1 - r}$ where $r \neq 1$
Radians	1 radian = $\frac{180}{\pi}$ degrees
Degrees	1 degree = $\frac{\pi}{180}$ radians

