

# Geometry - Review for 2nd Semester Exam

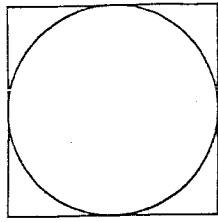
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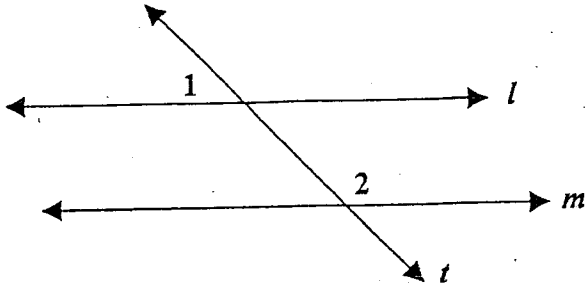
Period     

1. What is the area, in square inches, of the circle that is inscribed in a square that has a perimeter of 80 in.?

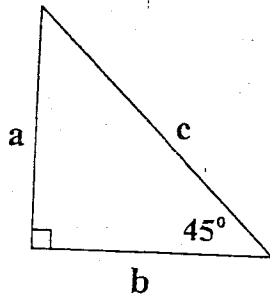


Answer →

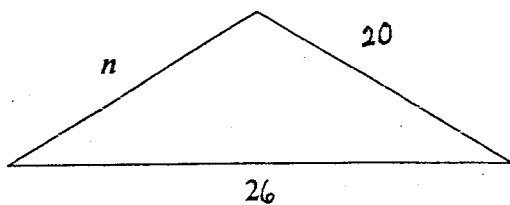
2. Refer to the figure shown. Parallel lines  $l$  and  $m$  are cut by transversal  $t$  and  $m\angle 1 = 40$ . Find the  $m\angle 2$ .



3. If  $c = 10\sqrt{2}$  in the triangle at the right, what is the value of  $b$ ?

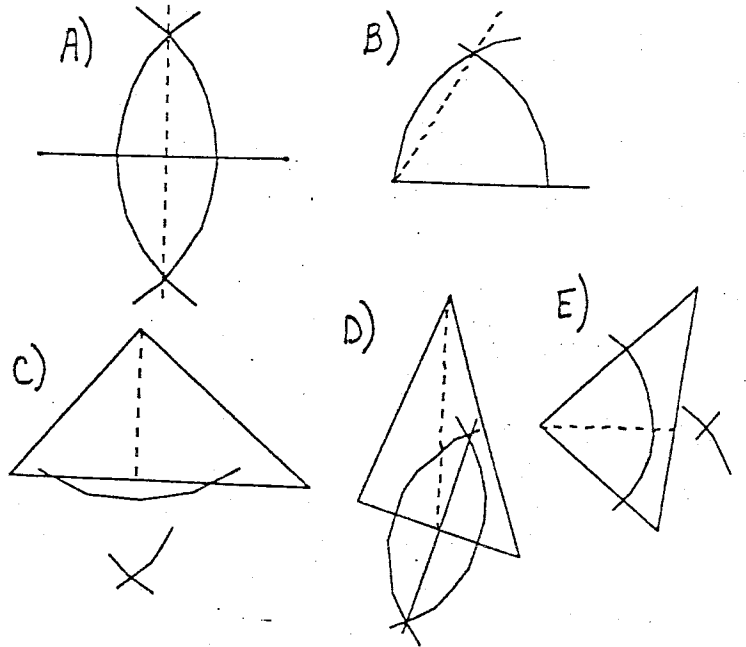


4. In the figure at the right,  $n$  is a whole number. What is the smallest possible value for  $n$ ?



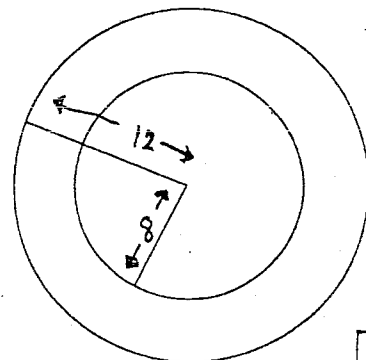
5. Which of the drawings below is the angle bisector construction?

6. Which of the drawings below is the construction of a median?

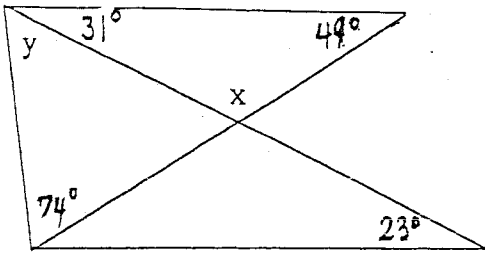


7. Name the 3 basic undefined terms of geometry?


8. Find the ratio of the areas of the small circle to the larger one.



9) In the figure,  $x + y =$

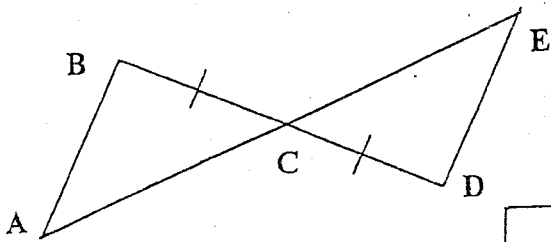


10) If a quadrilateral has four congruent sides,

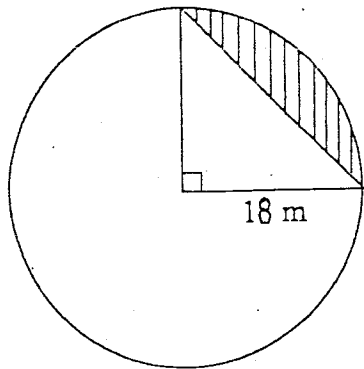
then it is a square.

True or False

11) What must be true in order for  $\triangle ABC \cong \triangle EDC$  by the ASA congruence property.

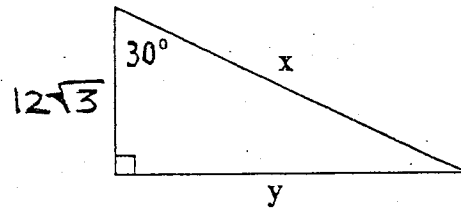


12) Find the area of the shaded segment. (Use  $\pi \approx 3.14$ ) and your answer to the nearest hundredth.

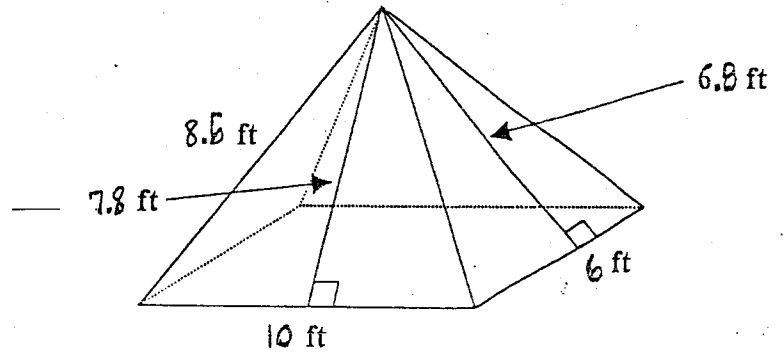


13) A point P has coordinates (8, -4). What are the coordinates of its image P' after a 180 rotation?

14) Find the values of x and y.



15) The pyramid shown has a rectangular base and faces that are isosceles triangles. Find the total surface area to the nearest tenth.



16) The measure of arc ACB is  $250^\circ$ . Find the  $m\angle AOB$ . O is the center of the circle.

