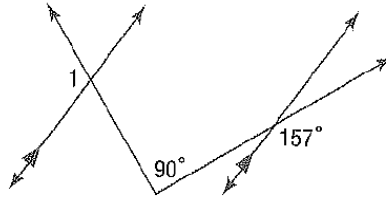


All answers must be exact, simplified form (i.e., they may contain π , simplified radicals, reduced fractions, or terminating decimals, but they may NOT contain decimal approximations).

_____ 1. Find the measure of $\angle 1$.



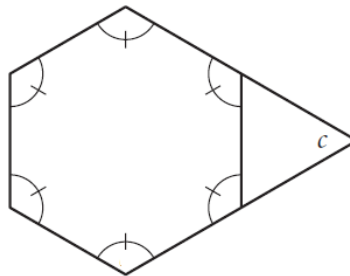
_____ 2. The measure of the supplement of an angle is 60 degrees less than three times the measure of the complement of the angle. Find the measure of the angle.

_____ 3. A rectangular sandbox is 3 ft. 6 in. by 4 ft. 2 in. The depth of the box is 8 inches, but the depth of the sand is $\frac{3}{4}$ of the depth of the box. What is the volume of sand in the sandbox? State the answer in cubic inches.

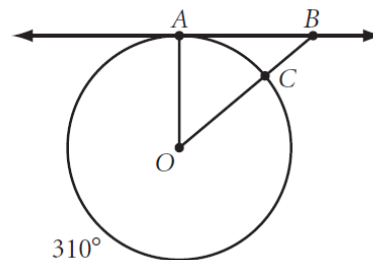
_____ 4. Write the equation of the perpendicular bisector of \overline{AB} if A has coordinates $(5, \frac{3}{4})$ and B has coordinates $(6, \frac{1}{2})$. State the equation in slope-intercept form.

_____ 5. $\triangle QRS$ is equilateral. QR is two less than two times a number, RS is six more than the number, and QS is ten less than three times the number. Find QR .

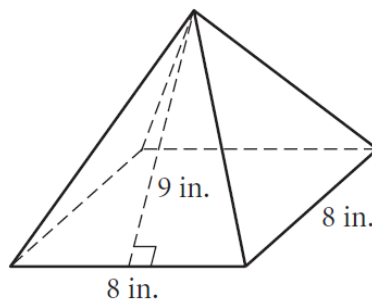
_____ 6. Find the measure of $\angle c$.



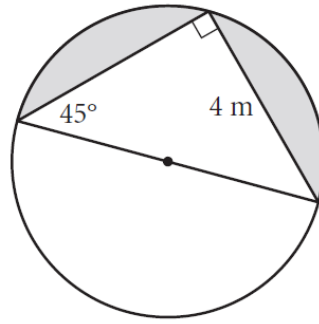
_____ 7. Major AC is 310° . O is the center of the circle. Find the measure of $\angle ABC$.



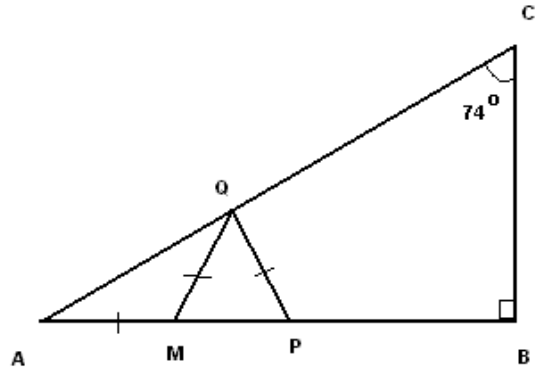
_____ 8. Find the volume of the square pyramid.



_____ 9. Find the area of the shaded region.

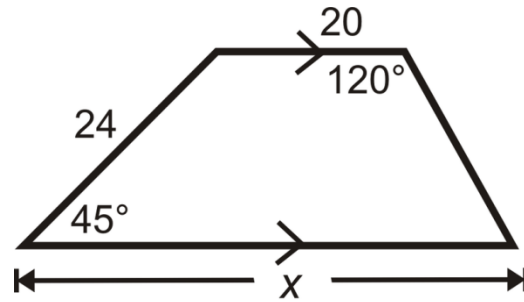


_____ 10. Find the measure of $\angle MOP$.

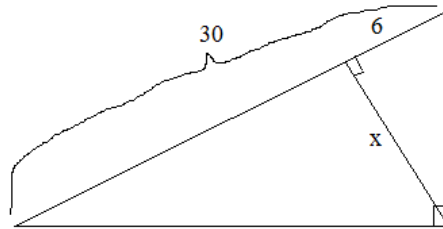


_____ 11. Find the area of an equilateral triangle with a side of length 12 cm.

_____ 12. Find the length of x .



_____ 13. Find the length of x .



_____ 14. Find the measurement of the arc represented by x .

