

Layout QUESTIONS

Show an understanding of the information in this chapter by answering the questions and filling in the blanks below.

1. All isosceles triangles have three sides equal in length, and all angles are 60° . (True; False)
2. The Pythagorean theorem states that the sum of the squares of the shorter sides of a right triangle equals the:
 - a. area of the triangle
 - b. perimeter of the triangle
 - c. square of the longer side
 - d. angles of the triangle
3. The diameter of a circle is a straight line between two points on a circle that also passes through the _____ of the circle.
4. The ratio of the circumference of a circle to its diameter is:
 - a. 360°
 - b. 180°
 - c. π
 - d. equal to the square of the hypotenuse
5. In a triangle, the sum of the three interior angles equals 180° . (True; False)
6. The radius of a circle is half as long as the _____ of the circle.
7. What is the value of pi?
 - a. 3
 - b. 3.1
 - c. 3.9
 - d. 3.1416
8. Bisecting an angle divides it into how many parts?
 - a. 1
 - b. 2
 - c. 3
 - d. 4

9. The sum of the angles of a square or a rectangle is which of the following?
 - a. 45°
 - b. 90°
 - c. 180°
 - d. 360°

10. If both diagonals of a room are equal, the corner angles are which of the following?
 - a. 45°
 - b. 90°
 - c. 180°
 - d. 360°

11. The square root of 9 is:
 - a. 3
 - b. 18
 - c. 27
 - d. 81

12. In a right triangle with Side a = 3" and Side b = 4", how long is Side c?
 - a. 5"
 - b. 7"
 - c. 12"
 - d. 25"

13. What is the circumference of a dowel with a diameter of $1\frac{3}{4}$ "?
 - a. 3.5"
 - b. 5.5"
 - c. 9.6"
 - d. 11.8"

14. If an arched window is 3'-6" from the center point to the edge and the curved part of the window is half a circle, the length of the curved part is _____

15. If a round table top has a radius of 4'-7", what is its circumference? _____