1. Which equation below represents the quadratic formula?

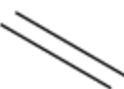   *a. $[-b \pm b^2 - 4ac] / [2a]$ = x

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

    c. $f(x) = a_0 + \sum_{n=1}^{\infty} (a_n \cos [n\pi x] / [L] + b_n \sin [n\pi x] / [L])$

2. Which of the following represents a set of parallel lines?

a. Option one

b. Option two

*c. Option three

3. What is the definition of an obtuse angle?

    *a. an angle **greater than** 90°
    b. an angle **equal to** 90°
    c. an angle **less than** 90°

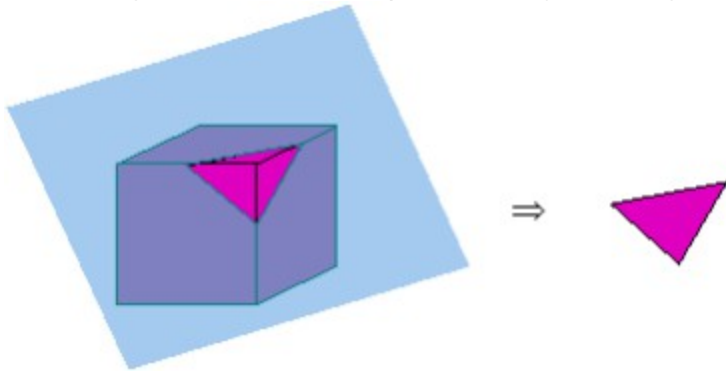4. Which formula below represents the area of a circle?

    a. $A = 2\pi r$
    *b. $A = \pi r^2$
    c. $A = \pi^2 r$
    d. $A = \sqrt{\pi}$

5. What geometric term is represented by the image below?

a. a corner
*b. a cross-section
c. the circumference
d. the perimeter

11. Using the data in the table below, calculate the mean, or average, number of points scored by Player B.

|	Game 1	Game 2	Game 3	Game 4	Game 5
Player A	13	12	9	11	13
Player B	12	11	15	20	12

*a. 14
b. 11.5
c. 13
d. 13.67

6. This instrument is commonly used by surveyors. It measures horizontal and vertical angles to determine the location of a point from other known points at either end of a fixed baseline, rather than measuring distances to the point directly. What is it called?

a. triangulator
b. binocular
c. tripod
*d. theodolite

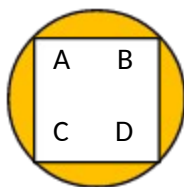7. What is the name of the missing shape in the flowchart below?
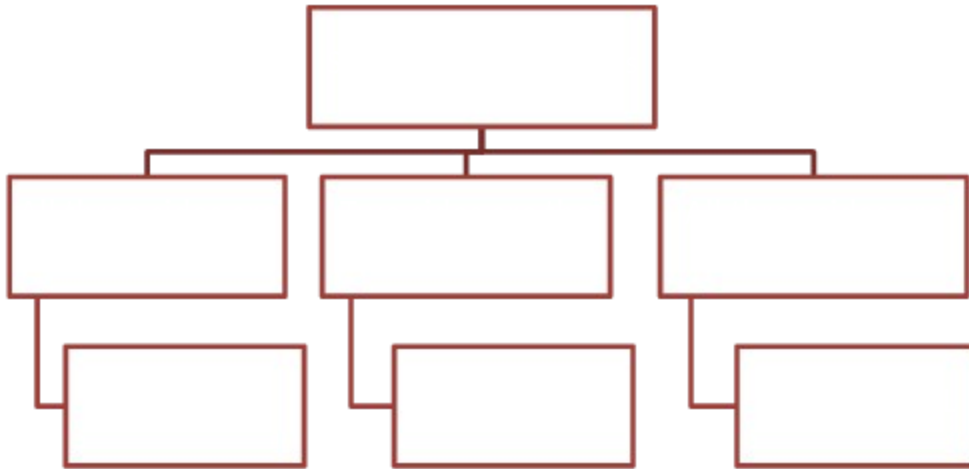
a. Acute
b. Obtuse
*c. Isosceles
d. Right

8. What category includes **all of the items** on the list below?

. Square
. Rectangle
. Rhombus
. Parallelogram
. Trapezoid
. Pentagon

a. Quadrilaterals
b. Triangles
c. Ellipses
*d. Polygons

9. Determine the area of the shaded portion in the diagram below.

. ABCD is a square
. ABCD touches the circle at 4 points
. The length of one side of the square ABCD is 2 cm

a. $\pi - 4$
*b. $2\pi - 4$
c. $3\pi^2 - 4$
d. $4\pi^3 - 4$
e. $5\pi - 4$