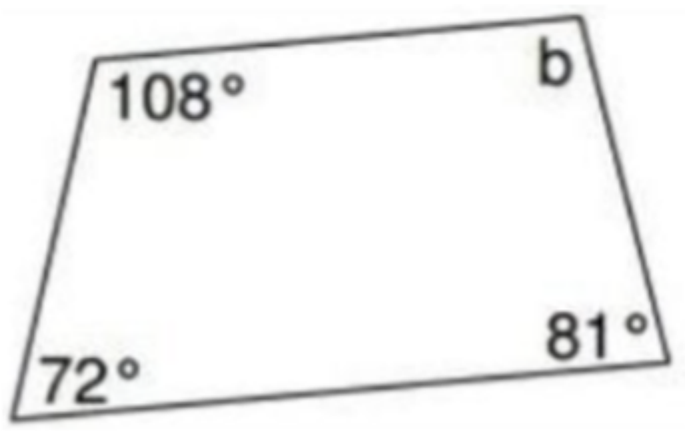
TPBO TEST-2

1.Find the measure of angle b (remember there are 360^0 in a quadrilateral)



A.109^0

B.99^0 ✓

C.108^0

D.72^0

2.Find what is the value of X

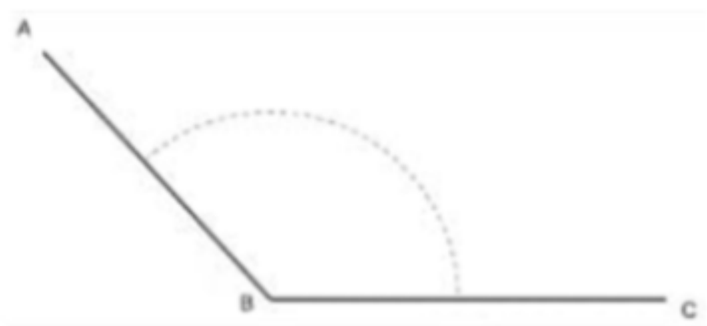
A.56

B.66 ✓

C.156

D.166

3.what type of angle is shown?



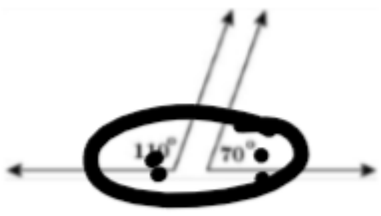
A. Acute

B. obtuse ✓

C. Right

D. Straight

4.the angle relationship shown is



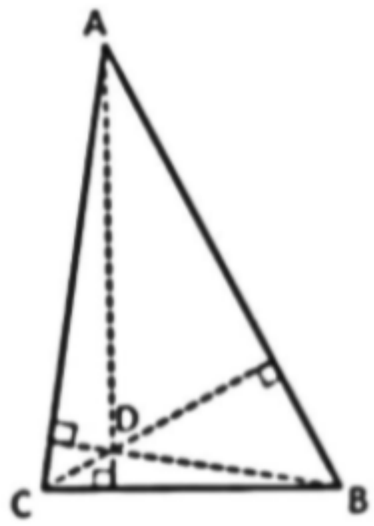
A.Complementary angles

B.Supplementary angles

C.vertical Angles

D.adjacent angles

5.if D is the orthocenter,what type of segments are drawn?



D is the "orthocenter" of ΔABC

A.medians

B.altitudes

C.angle bisectors

D.perpendicular bisectors

6.**Which of the following statements is correct**

1) if any one angle of triangle is less than 90 degree it is acute angle triangle

2) if any one angle of triangle is greater than 90, it is obtuse angle triangle

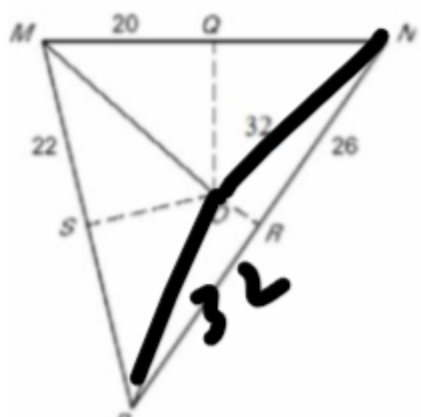
7. **Which of the following statements is correct**

1) circumcenter and ortho center lies outside of traingle for obtuse triangle

2) in center always lies inside triangle

8.the perpendicular bisectors (the dotted lines) intersect at point O.

What is the length of $\overline{PO}$?the diagram is not to scale



A.32 B.26

D.35 D.29

9.**Which of the following statements is correct**

1) polygon will have only straight line and closed

2) polygon can have combination of lines and curves

10.A seven sided figure is called___

A.hexagon

B.seven sided polygon

C.heptagon

D.decagon

11.find the number of sides of a polygon if the sum of its interior angles is equal to 1800°?

A.10

B.11

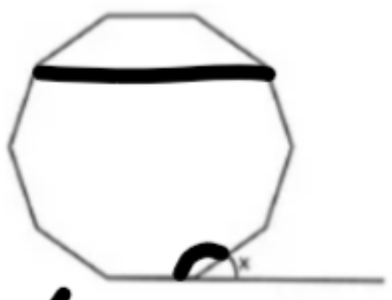
C.12

D.13

$(2n-4)90 = 1800$

$\Rightarrow n = 12.$

12.the figure below is a regular polygon.Find the measure of angle (in degrees)?



$\frac{(2n-4)\times 90}{n} = 144$

$x = 180 - 144 = 36.$

A.36 B.40

C.45 D.144

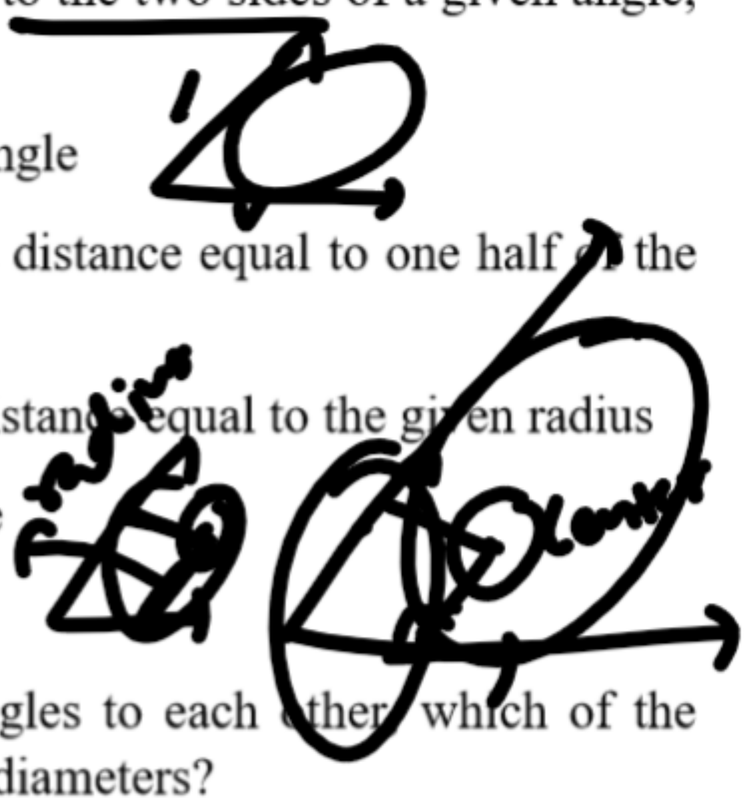
13. To draw a circle of a given radius which is also tangent to the two sides of a given angle, the first step is to draw

(a) Two nonparallel lines at right angles to the sides of the angle

(b) Two lines that are parallel to the sides of the angle at a distance equal to one half of the given radius

(c) Two lines that are parallel to the sides of the angle at a distance equal to the given radius

(d) Two parallel lines at right angles to the sides of the angle



14. When two diameters of a circle are drawn at right angles to each other, which of the following polygons will have all of the sides at 45° to these diameters?

(a) A hexagon inscribed in a given circle

(b) An octagon inscribed in a given circle

(c) A pentagon inscribed in a given circle

(d) A square inscribed in a given circle

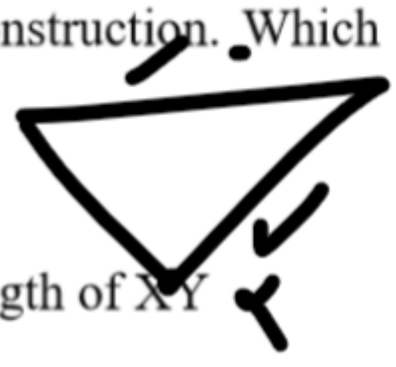
15. Line XY is to be divided into 12 equal parts by geometric construction. Which of the following statements concerning this procedure is correct?

(a) Ray line PY, drawn from Y, is the same length as XY

(b) A compass should be set to spread equal to one twelfth of the length of XY

(c) A line should be drawn from X to the 12th interval on ray line PY

(d) The acute angle formed by XY and ray line PY should be 30° or less



16. Which of the following actions should be your first step in constructing a square geometrically when you are given only the length of its diagonal?

(a) Lay out a horizontal line equal to one half of the given length

(b) Lay out a vertical line equal to one half of the given length

(c) Lay out a horizontal line equal to twice the given length

(d) Lay out a horizontal line equal to the given length