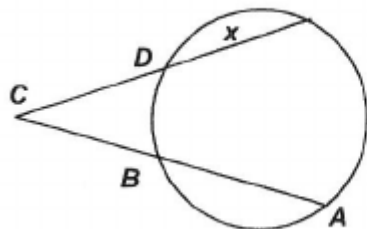


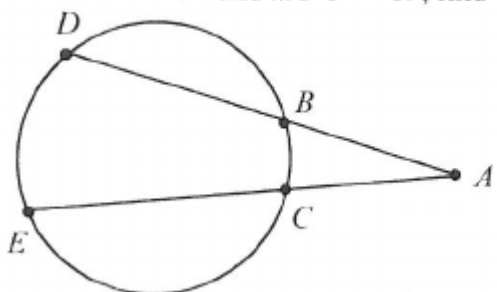
### Pre-Calc AB: Geometry Review

Find the value of  $x$  if  $AB = 15$ ,  $BC = 8$ , and  $CD = 7$ .



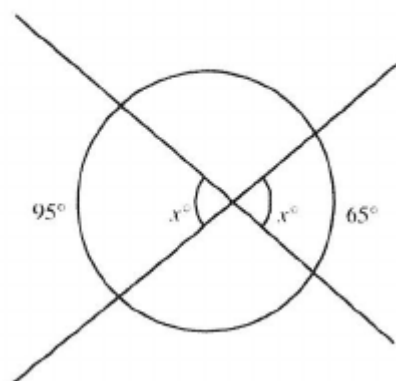
1.

If  $m\widehat{DE} = 131$  and  $m\widehat{BC} = 69$ , find the measure of  $\angle A$ .



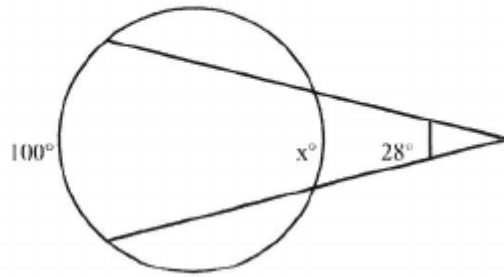
2.

Find  $x$ .



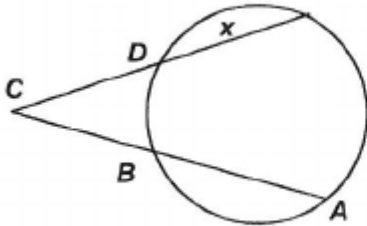
3.

Find  $x$ .



4.

Find the value of  $x$  if  $AB = 18$ ,  $BC = 10$ , and  $CD = 9$ .



[A] 22.1

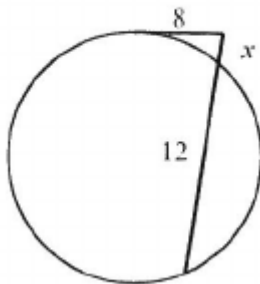
[B] 23.7

[C] 19.0

[D] 24.4

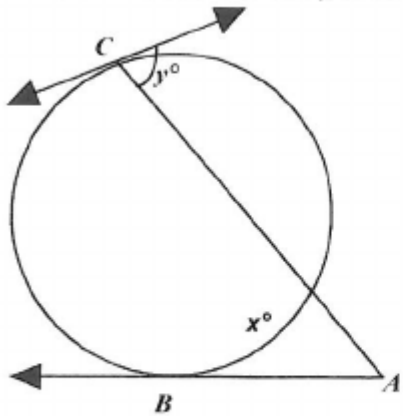
5.

Solve for  $x$ .



6.

Find the values of  $x$  and  $y$  if  $m\angle A = 22$  and  $m\widehat{BC} = 106$ .



[A] 84; 96

[B] 62; 192

[C] 84; 192

[D] 62; 96

7.

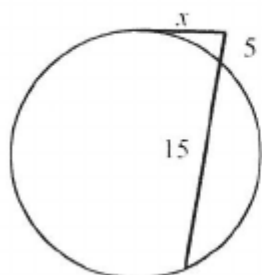
Solve for  $x$ .

[A] 9

[B] 5

[C] 15

[D] 10



8.

Find the sum of the measures of the interior angles of an octagon.

9.

Find the measure of each exterior angle of a regular polygon with 18 sides.

[A]  $20^\circ$

[B]  $160^\circ$

[C]  $22^\circ$

[D]  $202^\circ$

10.

Find the sum of the measures of the interior angles of a hexagon.

[A]  $360^\circ$

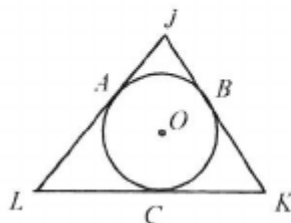
[B]  $540^\circ$

[C]  $900^\circ$

[D]  $720^\circ$

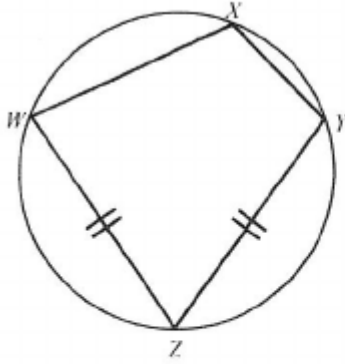
11.

The triangle and the circle are tangent at three points as shown (not drawn to scale). If  $JA = 10$ ,  $AL = 14$ , and  $CK = 12$ , find the perimeter of  $\triangle JKL$ .



12.

Given:  $m\angle X = 110$ ;  $\overline{WZ} \cong \overline{YZ}$ ;  $m\angle Y = 100$

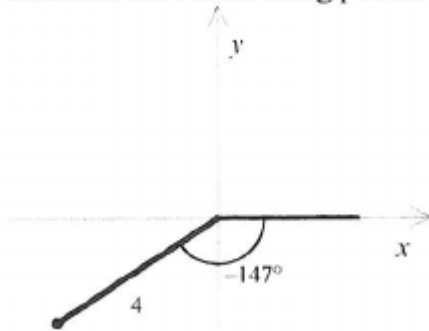


Refer to the diagram to find the measure of each of the following:

- a)  $m\angle Z$
- b)  $m\widehat{WZ}$
- c)  $m\angle W$
- d)  $m\widehat{WX}$

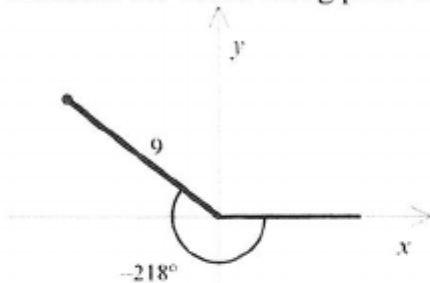
13.

22. Describe the vector using polar notation.



14.

Describe the vector using polar notation.



[A]  $(-9, 218^\circ)$  or  $9 \angle 218^\circ$

[B]  $(9, -218^\circ)$  or  $9 \angle -218^\circ$

[C]  $(9, 142^\circ)$  or  $9 \angle 142^\circ$

[D]  $(9, 38^\circ)$  or  $-9 \angle 38^\circ$

15.

Convert  $3 \angle 30^\circ$  to rectangular coordinates.

16.

1.  $x = \frac{135}{7}$
2.  $31^\circ$
3. 80
4. 44
5. A
6. 4
7. D
8. D
9.  $1080^\circ$
10. A
11. D
12. 72
13. a) 70 b) 110 c) 80 d) 90
14.  $4\angle - 147^\circ$
15. B
16.  $(\frac{3\sqrt{3}}{2}, \frac{3}{2})$