

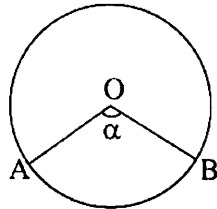
TEST 28

(Inscribed Angles)

- 1) O is the center of the circle.

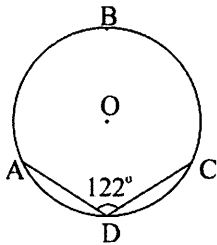
$\widehat{AB} = 84^\circ$. What is the value of α ?

- A) 42
B) 84
C) 50
D) 40
E) 30



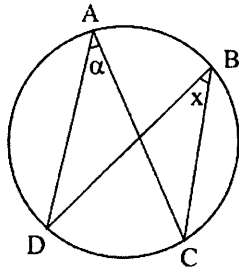
- 2) $\angle D = 122^\circ$. What is the value of $\angle ABC$?

- A) 120
B) 180
C) 200
D) 240
E) 244



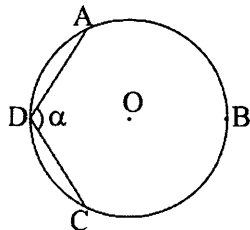
- 3) $\angle A = 54^\circ$. What is the value of $\angle x$?

- A) 27
B) 54
C) 44
D) 66
E) 88



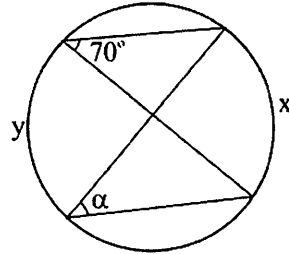
- 4) $\angle ABC = 260^\circ$. What is the value of α ?

- A) 220
B) 200
C) 130
D) 160
E) 110



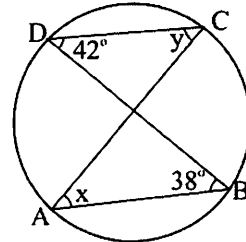
- 5) What is the value of $\angle \alpha$?

- A) 140
B) 70
C) 160
D) 170
E) 60



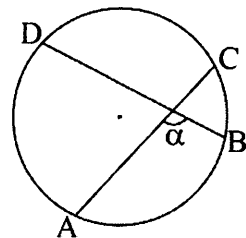
- 6) $\angle D = 42^\circ$, $\angle B = 38^\circ$, $\angle C = y$, $\angle A = x$. What is the value of $2x + 3y$?

- A) 180
B) 188
C) 190
D) 198
E) 208



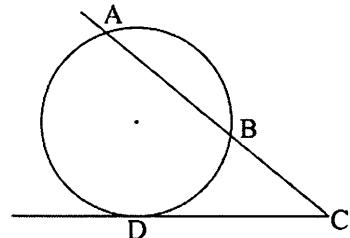
- 7) $\angle AB = 112^\circ$, $\angle DC = 72^\circ$. What is the value of α ?

- A) 100
B) 95
C) 90
D) 85
E) 92



- 8) $\widehat{AD} = 178^\circ$, $\widehat{BD} = 48^\circ$. What is the value of $\angle BCD$?

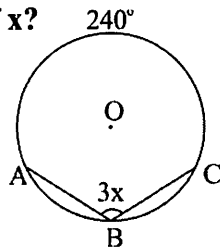
- A) 60
B) 65
C) 70
D) 75
E) 80



GEOMETRY

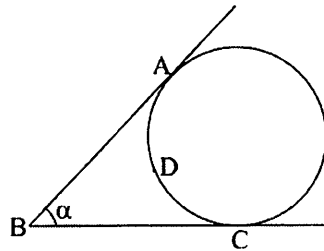
- 9) $\angle \widehat{AC} = 240^\circ$ and $\angle B = 3x$. What is the value of x ?

- A) 21
B) 42
C) 43
D) 44
E) 80



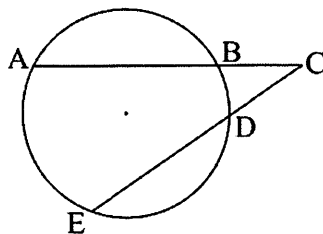
- 10) $\angle \widehat{ADC} = 128^\circ$. What is the value of α ?

- A) 50
B) 58
C) 52
D) 40
E) 36



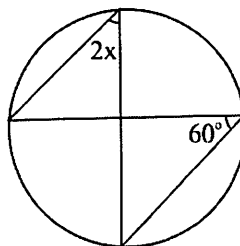
- 11) $\angle \widehat{AE} = 88^\circ$, $\angle \widehat{BD} = 28^\circ$. What is the value of $\angle C$?

- A) 24
B) 26
C) 30
D) 32
E) 60



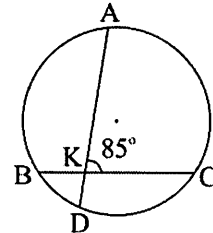
- 12) What is the value of $4x$?

- A) 160
B) 145
C) 140
D) 120
E) 125



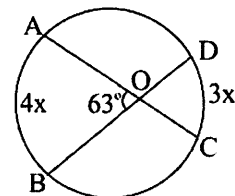
- 13) $\angle \widehat{AB} = 138^\circ$, $\angle \widehat{DC} = 2x$, and $\angle AKC = 85^\circ$. What is the value of x ?

- A) 70
B) 80
C) 85
D) 90
E) 95



- 14) $\angle \widehat{AB} = 4x$, $\angle \widehat{DC} = 3x$, and $\angle AOB = 63^\circ$. What is the value of x ?

- A) $\frac{88}{7}$
B) $\frac{88}{5}$
C) $\frac{166}{5}$
D) $\frac{85}{2}$
E) 18



- 15) $\angle A = 10^\circ$,

$$\angle \widehat{BC} = 4x^\circ,$$

$$\angle \widehat{DE} = 6x^\circ,$$

What is the value of x ?

- A) 54
B) 50
C) 48
D) 44
E) 36

