

Ch. 10

Key

Given:
 \overline{AB} is tangent at B
 $\angle HOG = 15^\circ$
 $\widehat{DC} = 4^\circ$
 $\widehat{IH} = 30^\circ$
 $\widehat{GF} = 80^\circ$

$$\begin{array}{r} 71 \\ 180 \\ -125 \\ \hline 55 \end{array}$$

$$\begin{array}{r} 181 \\ 55 \\ \hline 186 \end{array}$$

$$\begin{array}{r} 71 \\ 180 \\ -135 \\ \hline 45 \end{array}$$

$$\begin{array}{r} 71 \\ 180 \\ -61 \\ \hline 116 \end{array}$$

$$\begin{array}{r} 116 \\ 40 \\ \hline 156 \end{array}$$

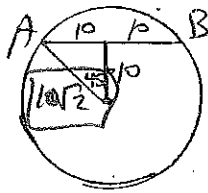
- ① $\widehat{HG} = 15^\circ$
- ② $\angle GCF = 40^\circ$
- ③ $\angle FEB = 95^\circ$
- ④ $\angle OBA = 90^\circ$
- ⑤ $\angle HAG = \frac{1}{2}(15-4) = \frac{11}{2}^\circ$

- ⑥ $\widehat{ID} = 131^\circ$
- ⑦ $\angle IOC = 135^\circ$
- ⑧ $\widehat{BC} = 45^\circ$
- ⑨ $\widehat{FB} = 55^\circ$
- ⑩ $\angle GAB = 45^\circ$

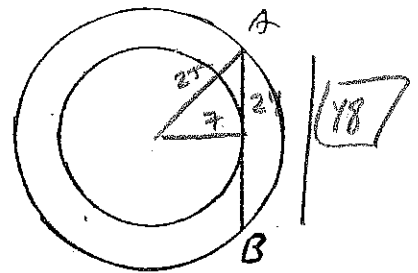
$$\begin{array}{r} 71 \\ 180 \\ 49 \\ \hline 171 \end{array}$$

$$\begin{array}{r} 80 \\ 55 \\ \hline 135 \\ -45 \\ \hline 90 \end{array}$$

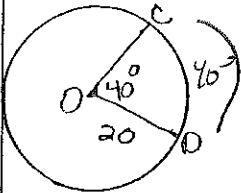
- 18) If $AB = 20$
Find OA



- 19) 2 concentric circles with radii of lengths 7 and 25. Find the length of \overline{AB}



For 20-22



- 20) Find $m\widehat{CD} = 40^\circ$

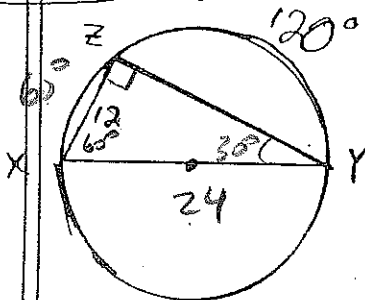
- 21) Find the circumference of circle O

$$C = 2\pi r = 40\pi$$

- 22) Find the length of \widehat{CD}

$$\frac{40}{360} \cdot 40\pi = \frac{1}{9} \cdot 40\pi = \frac{40\pi}{9}$$

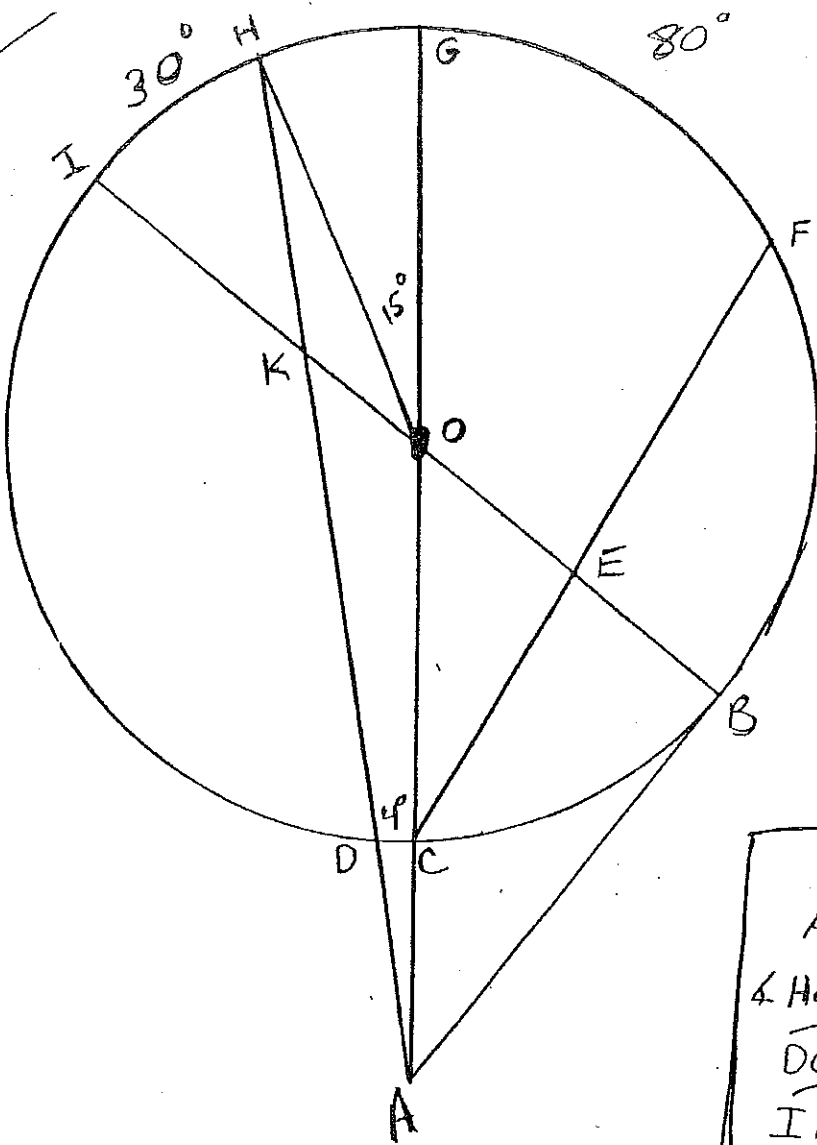
For 23-24



- 23) Find $m\angle Y = 30^\circ$

- 24) Find the length of the diameter.

$$24$$



Given:

\overline{AB} is tangent at B

$\angle HOG = 15^\circ$

$\widehat{DC} = 4^\circ$

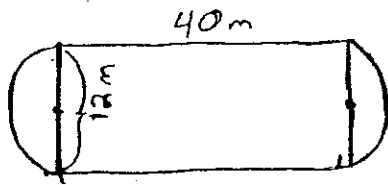
$\widehat{IH} = 30^\circ$

$\widehat{GF} = 80^\circ$

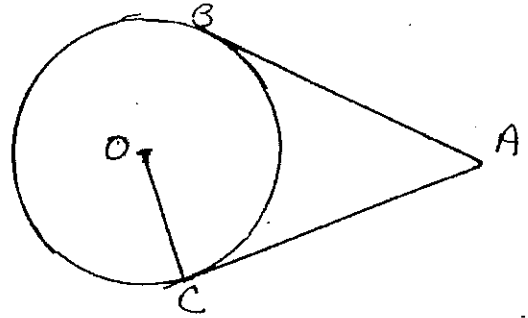
- ① $\widehat{HG} =$
- ② $\angle GCF =$
- ③ $\angle FEB =$
- ④ $\angle OBA =$
- ⑤ $\angle HAG =$

- ⑥ $\widehat{ID} =$
- ⑦ $\angle IOC =$
- ⑧ $\widehat{BC} =$
- ⑨ $\widehat{FB} =$
- ⑩ $\angle GAB =$

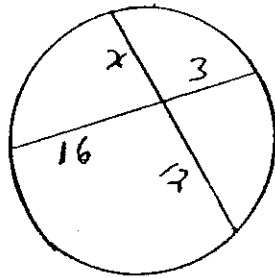
- ⑪ Find the length of the track



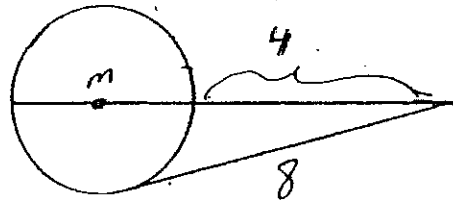
- ⑫ AB and AC are tangents
 $AB = 3x - 15$ $AC = 4x - 20$
 $OC = 2x + 1$
 what is the diameter



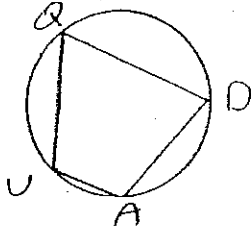
- ⑬ Find x



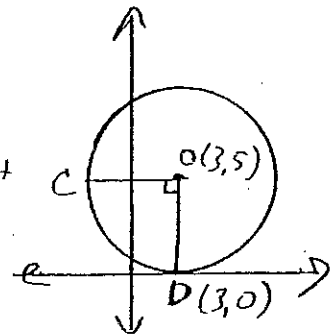
- ⑭ Find the radius of O m



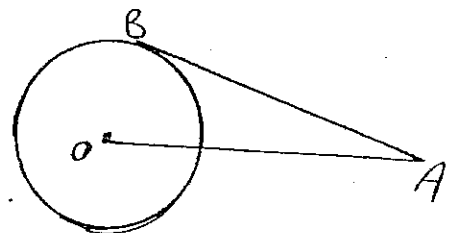
- ⑮ QUAD is inscribed with $\angle Q = 75^\circ$ and $\angle A =$



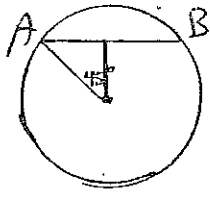
- ⑯ OO is tangent to the x-axis and D(3,0) Find $\overline{CD} =$



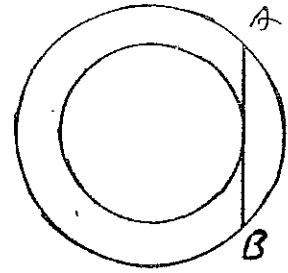
- ⑰ Find AB, if $AO = 15$ and the diameter of the circle is 18



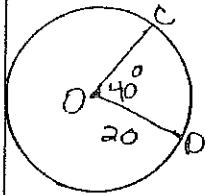
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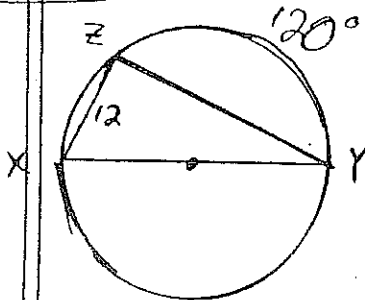


For 20-22



- 20) Find $m\widehat{CD} =$
- 21) Find the circumference of circle O
- 22) Find the length of \widehat{CD}

For 23-24



- 23) Find $m\angle Y$
- 24) Find the length of the diameter.