Name Adv Geo 10-5, Day 2

18 Given: \overrightarrow{VQ} is tangent to $\bigcirc O$ at Q. \overrightarrow{QS} is a diameter of $\bigcirc O$.

$$\widehat{PQ} = 115^{\circ}; \angle RPS = 36^{\circ}$$

Find: a ∠R

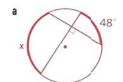
- b ∠S
- c \widehat{SR}
- \mathbf{d} $\widehat{\mathbf{QR}}$
- e ∠QPR
- f ∠QPS
- g ∠QTP
- h ∠PQV
- i PRQ
- j RSP
- k ∠VQS
- I ∠QOP

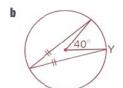


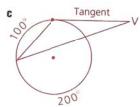
19 Given $m \angle P = 60$ and $\widehat{mPSR} = 128$, find $m \angle Q$, $m \angle R$, and $m \angle S$.

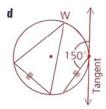


- 20 The major arc cut off by two tangents to a circle from an outside point is five thirds of the minor arc. Find the angle formed by the tangents.
- 21 Find the measure of each arc or angle labeled with a letter.

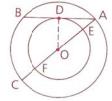






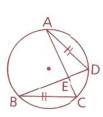


22 Given circles concentric at O, \overline{AB} tangent to the inner circle, and $\widehat{BC} = 84^{\circ}$, find the measures of $\angle A$, \widehat{DE} , and \widehat{DF} .



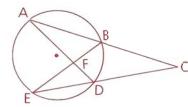
23 Given:
$$\widehat{AB} = 92^{\circ}$$
,
 $\angle AEB = 82^{\circ}$

Find: AD



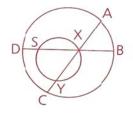
24 Given:
$$\angle AFE = 89^{\circ}$$
,

Find: AE and BD

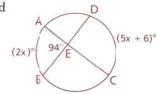


25 Given:
$$\widehat{SY} = 112^\circ$$
, $\widehat{DC} = 87^\circ$

Find: AB

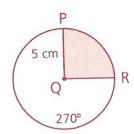


26 If
$$\widehat{DC} = (5x + 6)^\circ$$
, $\widehat{AB} = (2x)^\circ$, and $\angle AEB = 94^\circ$, find \widehat{AB} .



28
$$\triangle$$
ABC is inscribed in a circle (all sides are chords), AB = 12, AC = 6, and BC = $6\sqrt{3}$. Find mBC.

30 a Find the exact area and circumference of Circle Q, and find the area to the nearest tenth.



- b. Find the exact area of the shaded region, and estimate it to the nearest tenth.
- c. Find the exact length of and PR, and estimate it to the nearest tenth.