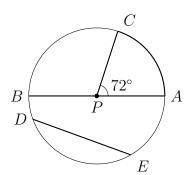
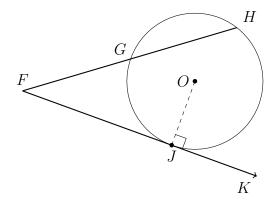
27 February 2023

## 11.1 Circle vocabulary study sheet

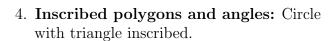
- 1. **Internal line segments:** Circle with center at point P, as shown.
  - Diameter  $\overline{AB}$
  - Radius  $\overline{CP}$
  - Chord  $\overline{DE}$
  - Central angle  $\angle APC$
  - Arc  $\widehat{AC}$  (with measure  $\widehat{mAC} = 72^{\circ}$ )



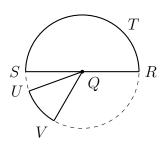
- 2. External lines: Circle with center at point O, at right.
  - Secant  $\overline{FGH}$
  - Radius  $\overline{OJ}$
  - Tangent  $\overline{FJK}$
  - $\bullet$  Point of tangency J
  - Note:  $\overline{OJ} \perp \overline{FJK}$

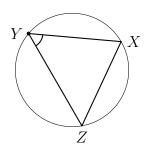


- 3. Areas: Circle with center at point Q.
  - Diameter  $\overline{RS}$
  - $\bullet$  Semi-circle RST
  - ullet Sector QUV



- Inscribed  $\triangle XYZ$
- Inscribed  $\angle XYZ$





- 5. Triangle vocabulary: vertex, side, hypotenuse, acute, obtuse, perpendicular, median, altitude, perpendicular bisector
- 6. Situations with right triangle hypotenuses as circle radii.
- 7. Use the tangent function to determine the measure of the central angle  $\theta$ .
- 8. A regular pentagon is inscribed in a circle as shown below. What is the measure of the central angle between two consecutive vertices,  $m\angle AOB$ ?