Area Formulas

Rectangle / Parallelogram $A = bh$

Triangle $A = \frac{1}{2}bh$

Circle $A = \pi r^2$

$C = \pi d$ or $C = 2\pi r$

Trapezoid - $A = \frac{1}{2}h(b_1 + b_2)$

Rhombus or Kite = $A = \frac{1}{2}d_1d_2$

Regular Polygon = $A = \frac{1}{2}ap$

Area of a triangle given SAS = $A = \frac{1}{2}bc(\sin A)$

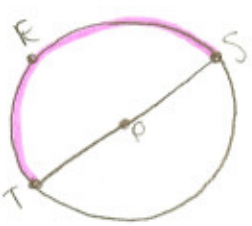
$S = \frac{O}{H}$

$C = \frac{A}{H}$

$T = \frac{O}{A}$

Circles

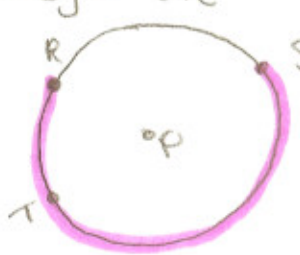
Semicircle



$\overset{\frown}{TRS}$ is a semicircle

$m\overset{\frown}{TRS} = 180°$

major arc



$\overset{\frown}{RTS}$ is a major arc

$m\overset{\frown}{RST} = 360 - \overset{\frown}{RS}$

minor arc

$\overset{\frown}{RS}$ is a minor arc

$m\overset{\frown}{RS} = m\angle RPS$

Area of a sector of a circle = $\frac{\text{measure of the arc}}{360} \cdot \pi r^2$

Adjacent arcs = are arcs of the same circle that have exactly one point in common

concentric circles - lie in the same plane and have the same center

arc length = $\frac{\text{measure of the arc}}{360} \cdot 2\pi r$