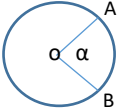
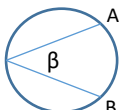
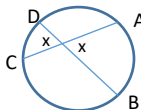
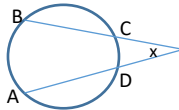
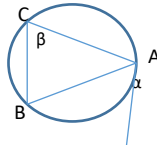
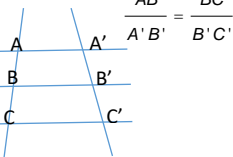
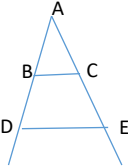




# Escuela Nacional Preparatoria. Colegio de Matemáticas.

## Formulario para Matemáticas V (1500)

<p>Propiedades de los ángulos en la circunferencia</p>	<p>Ángulo central <math>\alpha = BA</math></p> 	<p>Ángulo inscrito <math>\beta = \frac{BA}{2}</math></p> 	<p>Ángulo interior <math>x = \frac{BA+DC}{2}</math></p> 	<p>Ángulo exterior <math>x = \frac{BA-DC}{2}</math></p> 	<p>Ángulo seminscrito <math>\alpha = \beta = \frac{BA}{2}</math></p> 
<p>Geometría y trigonometría</p>	<p>Teorema de Tales</p>  $\frac{AB}{A'B'} = \frac{BC}{B'C'}$	<p>Teorema de Tales</p>  $\frac{AB}{BC} = \frac{DE}{CE}$	<p>Identidades trigonométricas</p> $\begin{aligned} \operatorname{sen}^2(\theta) + \operatorname{cos}^2(\theta) &= 1 \\ \operatorname{sec}^2(\theta) &= 1 + \operatorname{tan}^2(\theta) \\ \operatorname{csc}^2(\theta) &= 1 + \operatorname{cot}^2(\theta) \end{aligned}$	<p>Identidades trigonométricas</p> $\begin{aligned} \operatorname{sen}(\theta) \operatorname{csc}(\theta) &= 1 \\ \operatorname{tan}(\theta) \operatorname{cot}(\theta) &= 1 \\ \operatorname{cos}(\theta) \operatorname{sec}(\theta) &= 1 \\ \operatorname{tan}(\theta) &= \frac{\operatorname{sen}(\theta)}{\operatorname{cos}(\theta)} \end{aligned}$	<p>Ley de senos</p> $\frac{a}{\operatorname{sen}A} = \frac{b}{\operatorname{sen}B} = \frac{c}{\operatorname{sen}C}$ <p>Ley de cosenos</p> $a^2 = b^2 + c^2 - 2bc \operatorname{cos} A$
<p>Geometría analítica</p>	<p>Punto medio</p> $\begin{aligned} x_m &= \frac{x_1 + x_2}{2} \\ y_m &= \frac{y_1 + y_2}{2} \end{aligned}$	<p>Distancia entre dos puntos</p> $d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$	<p>Coordenadas que divide a un segmento en una razón dada</p> $\begin{aligned} x_r &= \frac{x_1 + r x_2}{1 + r} \\ y_r &= \frac{y_1 + r y_2}{1 + r} \end{aligned}$	<p>Pendiente de una recta</p> $m = \frac{y_2 - y_1}{x_2 - x_1}$ <p>Ángulo entre dos rectas</p> $\theta = \arctan\left(\frac{m_2 - m_1}{1 + m_1 m_2}\right)$	<p>Formas de la ecuación de la recta</p> $\begin{aligned} y - y_1 &= m(x - x_1) \\ y &= mx + b \end{aligned}$
<p>Logaritmos</p>	$\log_a(mn) = \log_a(m) + \log_a(n)$		$\log_a \frac{m}{n} = \log_a(m) - \log_a(n)$	$\log_a(m^n) = n \log_a(m)$	$\log_a(m) = \frac{\log_b(m)}{\log_b(a)}$