## **Complex Numbers: Polar to Rectangular Conversion (10:11)**

Describe how complex numbers are expressed in rectangular and polar format.

Identify which math operations are suited for specific complex number formats.

Identify the means of determining the real x component of an equivalent complex number expressed in rectangular format given a complex number expressed in polar format.

Identify the means of determining the imaginary y component of an equivalent complex number expressed in rectangular format given a complex number expressed in polar format.

Given complex number 6.4∠29.7° express it using rectangular format.

Given complex number 10.6∠-23.4° express it using rectangular format.

Given the following complex numbers in polar format convert them to rectangular format:

D POLAR :	2 POLAR :	3 POLAR :	POLAR :	(5) POLAR :
A= 9.7 2-168.1°	Ã= 4.4∠59.9°	Ă= 7.5∠105.5°	A= 1.4 2-72.9°	A= 5.8 1 88.1°
RECTANGULAR:	RECTANGULAR:	RECTADOUAR :	RECTADOUAR:	RECTANGULAR;
Ā=	Ā=	Ă =	Ă =	Ă=