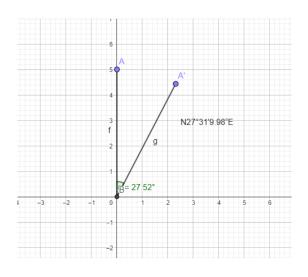
Universidad de San Carlos de Guatemala Centro Universitario de Occidente División de Ciencias de Ingeniería Laboratorio de topografía 1 Auxiliar Mario Ordoñez Pérez

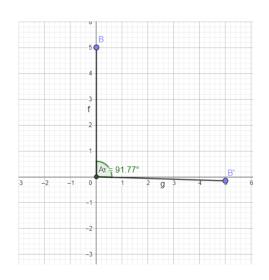
> Hoja de trabajo 2 Conversión y Gráfica de Azimuts y Rumbos

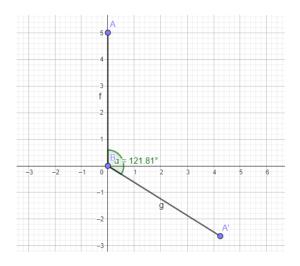
> > Marlon Ivan Carreto Rivera 201230088

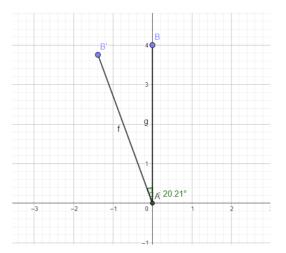
## **AZIMUT A RUMBOS**

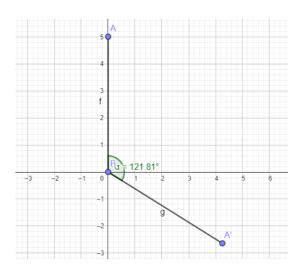
Azimut	Procedimiento	Rumbo
27'31'10"	1er. Cuadrante Rumbo=Azimut	N 27'31'9.98" E
91'46'15''	91'46'15''-180'0'0"	S 88'13'45" E
121°48'40''	121°48'40''-180'0'0''	S 58'11'20" E
339°47'40''	339'47'40"-360'0'0"	N 20'12'20" O
291°06'05''	291°06'05''-360'0''	N 68'53'55'O
313°56'45"	313°56'45"-360'0'0"	N 46'03'15'O
236°20'20''	236°20'20'' -270'0'0''	S 33'39'40''O
173°29'20''	173°29'20'' -180'0'0''	S 6'30'40" E
193°18'40''	193°18'40''-270'0'0'	S76'53'20" O
224°9'0''	224'9'0" - 270'0'0"	S 45'51'00"O
349°11'20"	349°11'20"-360'0'0"	N 10'48'40"
1°36'40''	1er. Cuadrante Rumbo=Azimut	N 1'36'40" E
314°47'20''	314°47'20" -360'0'0"	N 45'12'40" O
235°58'20''	235°58'20" -270'0'0"	S 34'01'40" O

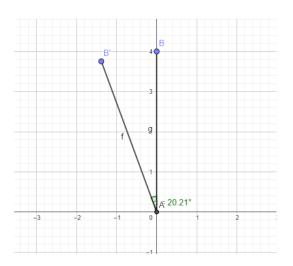


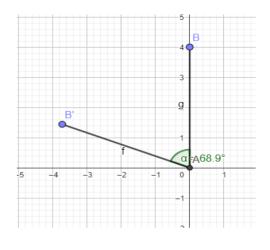


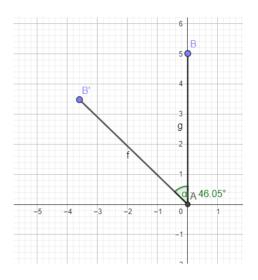


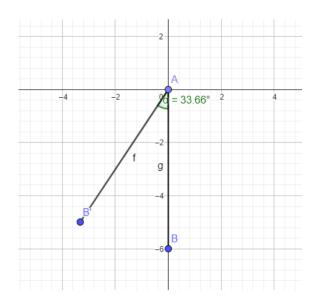


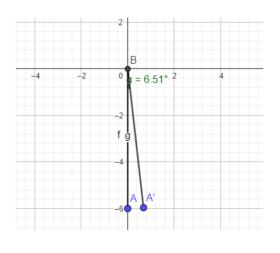


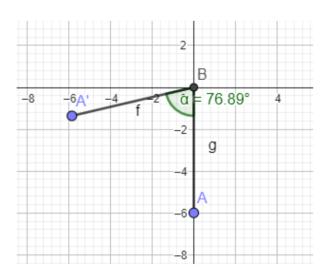


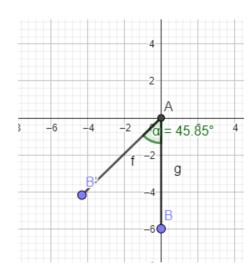


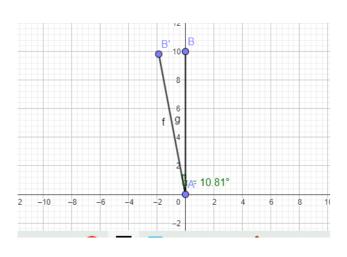


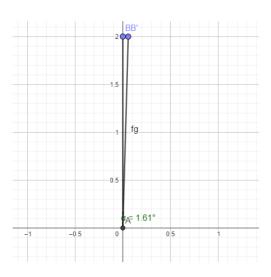


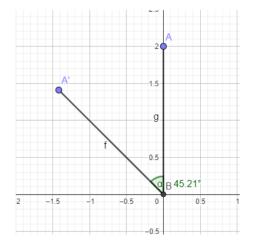


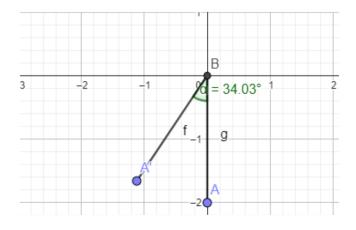












## **RUMBOS A AZIMUT**

Rumbo	conversión	Azimut
S 82°45'7'' E	180°-82.751911	97°14'53"
N 76°25'40" E	1er. Cuadrante Rumbo=Azimut	76°25'40"
N 17°45'10" W	360°17.7527°	342°14'50"
S 85° 30' E	180°-85.5°	94°30'00"
S 82°45'7"E	180°-82.751°	97°14'53"
N 90°00' E	1er. Cuadrante Rumbo=Azimut	90°00'00"
S 45°00' E	180°-45°	135°0'00"
N 35°15'10" W	360°-35.25277°	324°44'50"
N 31°45'37" W	360°-31.76°	328°14'23"
N 51°9'37'' W	360°-51.16027°	308°50'23"
S 50°39'8" W	180°+50.6522°	230°39'07"
S 40°21'6" W	180°+40.3516°	220°21'05"
S 62°14'38" E	180°-62.24388°	117°45'22"
S 6°59'2" W	180°+6.98388°	186°59'01"

