



Solutions #3

Dear CVG 2171 students,

Below are the solutions to the last assignment. You may contact your TA if anymore explanation is needed.

1-

$98^{\circ}12'55''$, $153^{\circ}26'40''$, $192^{\circ}56'22''$, and $288^{\circ}12'50''$

Bearings	Angles
S $81^{\circ}47'05''$ E	$55^{\circ}13'45''$
S $26^{\circ}33'20''$ E	$39^{\circ}29'42''$
S $12^{\circ}56'22''$ W	$95^{\circ}16'28''$
N $71^{\circ}47'10''$ W	$170^{\circ}00'05''$

2-

N $32^{\circ}42'38''$ E, S $54^{\circ}02'02''$ E, S $22^{\circ}42'56''$ W, and N $44^{\circ}35'26''$ W

Azimuths	Angles
$32^{\circ}42'38''$	$93^{\circ}15'20''$
$125^{\circ}57'58''$	$76^{\circ}44'58''$
$202^{\circ}42'56''$	$112^{\circ}41'38''$
$315^{\circ}24'34''$	$77^{\circ}18'04''$

3-

$A = 82^{\circ}13'15''$, $B = 106^{\circ}35'18''$, $C = 28^{\circ}45'06''$, $D = 205^{\circ}14'56''$, $E = 117^{\circ}11'25''$

Course	Bearing	Azimuth
<i>AB</i>	Due North	$0^{\circ}00'00''$
<i>BC</i>	N $73^{\circ}24'42''$ W	$286^{\circ}35'18''$
<i>CD</i>	S $44^{\circ}39'36''$ E	$135^{\circ}20'24''$
<i>DE</i>	S $19^{\circ}24'40''$ E	$160^{\circ}35'20''$
<i>EA</i>	S $82^{\circ}13'15''$ E	$97^{\circ}46'45''$



4-

1875 Magnetic Bearing	1875 Declination	Present Declination	Present Magnetic Bearing
N32°45'E	8°12'W	2°30'E	N22°03'E

5-

Direct: 0°00'00", 106°52'06", 191°38'43", 359°59'58"

Reverse: 0°00'00", 106°52'04", 191°38'41", 0°00'00"

106°52'05"; 84°46'37"; 168°21'17"; misclosure = -3"

Good luck,