## Algebra II

12-6
Law of Cosines
Law of Cosines - Given the general triangle $\triangle \mathrm{ABC}$,


Find lengths to three significant digits and the measures of the angles to the nearest tenth of a degree.

1) $a=6$
$b=7$
$C=20^{\circ}$
$c=$ $\qquad$

Find lengths to three significant digits and the measures of the angles to the nearest tenth of a degree.
9) $a=13$
$b=30$
$c=40$
smallest angle $=$ $\qquad$

(pg 583)

1) A ranger in an observation tower can sight the north end of a lake 15 km away and the south end of the same lake 19 km away. The angle between these two lines of sight is $104^{\circ}$. How long is the lake?

Assignment:
Pg. 582
1-14 all,
Pg. 583
2-8 all.

