Today's Learning Goal(s):

Date: _____

By the end of the class, I will be able to:

a) solve a triangle involving the Cosine Law and obtuse angles.

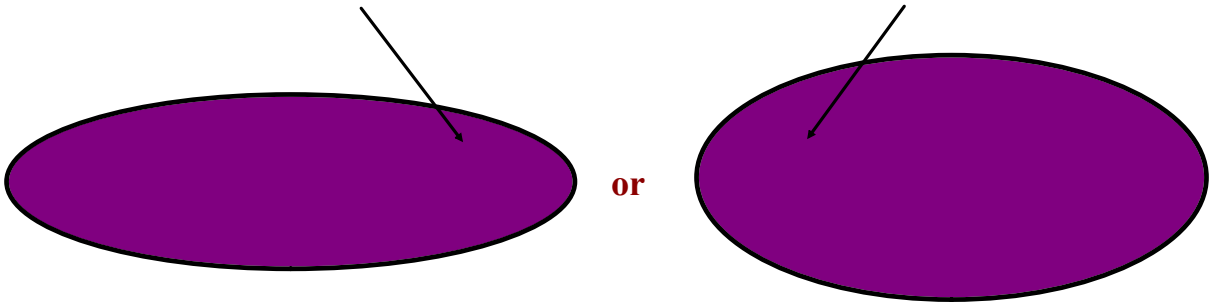
Last day's work: pp. 318-319 #1, 2, 3a, 4, 5ac, 7 [15,17]

5.7 The Cosine Law

Date: _____

Recall: We use the Cosine Law when we are given:

2 sides and the **contained** angle (SAS) or all 3 sides (SSS)



Ex. 1 Given ΔABC, where $\angle A = 55°$, $b = 10$ cm and $c = 12$ cm.
Determine the length of a, to the nearest tenth.

Ex. 2: Repeat given $\angle A = 125°$.

Ex. 3 Given ΔDEF, where $d = 18$ cm, $e = 9$ cm and $f = 12$ cm.
Calculate the measure of $\angle D$, to the nearest degree.

Note:

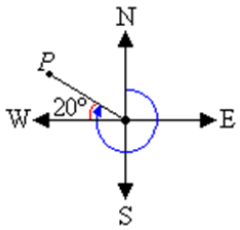
A **true bearing** to a point is the angle between due north and the line of travel of an object measured in degrees in a clockwise direction. We will refer to this as **bearing**.

A **conventional bearing** of a point is stated as the number of degrees east or west of the north-south line. We will refer to this as **direction**.

In the diagram below, the bearing of point P is 290°.

The direction method can be stated in two ways:

- W20°N (point P is 20° north of west)
- N70°W (point P is 70° west of north)



Are there any Homework Questions you would like to see on the board?

Last day's work: pp. 318-319 #1, 2, 3a, 4, 5ac, 7 [15,17]

Today's Homework Practice includes:

pp. 325-327 #1b, 2b, 3bc, 4ac, 5, 6, 8 [12,14]