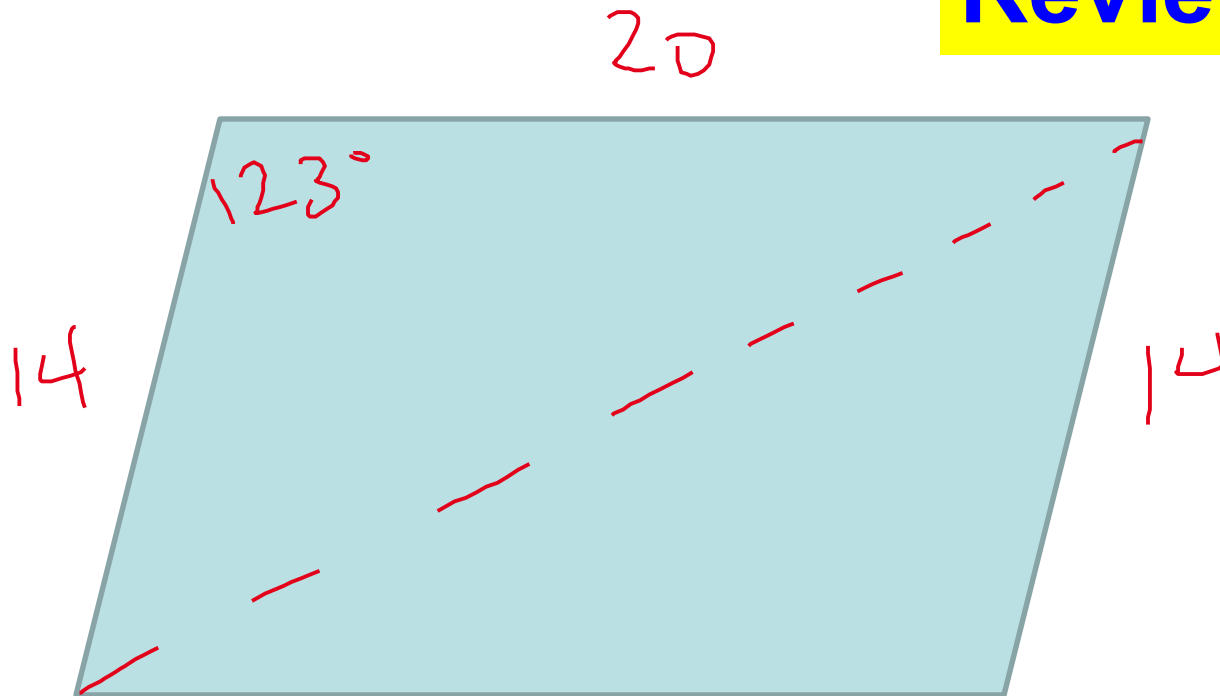


$$A = \frac{1}{2} (\text{side1}) (\text{side2}) (\sin \text{ INCLUDED ANGLE})$$

↑ Area of a TRIANGLE

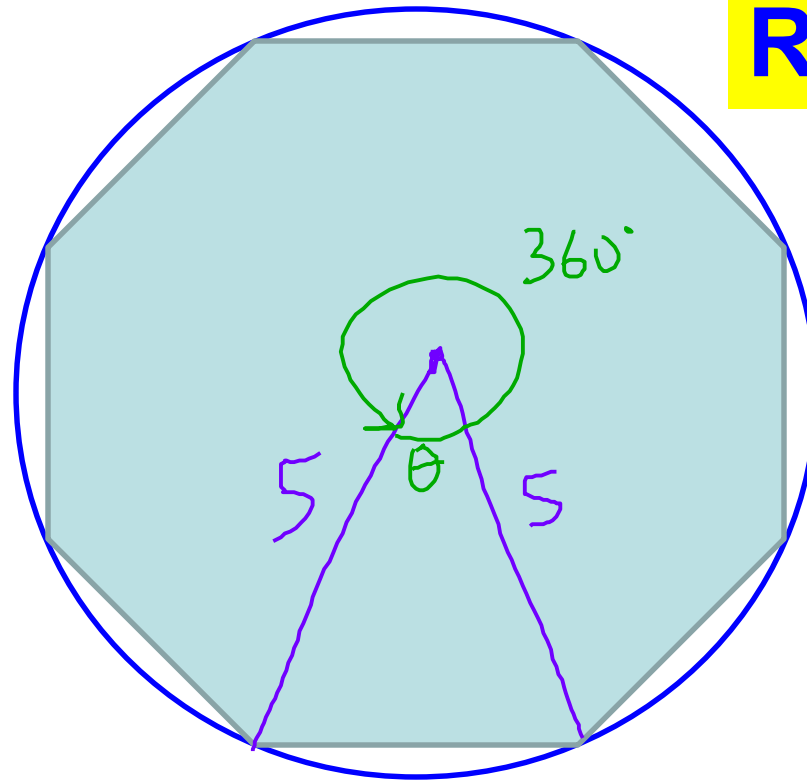
Review2 #11



$$A = \frac{1}{2} (\text{side1}) (\text{side2}) (\sin \text{ INCLUDED ANGLE})$$

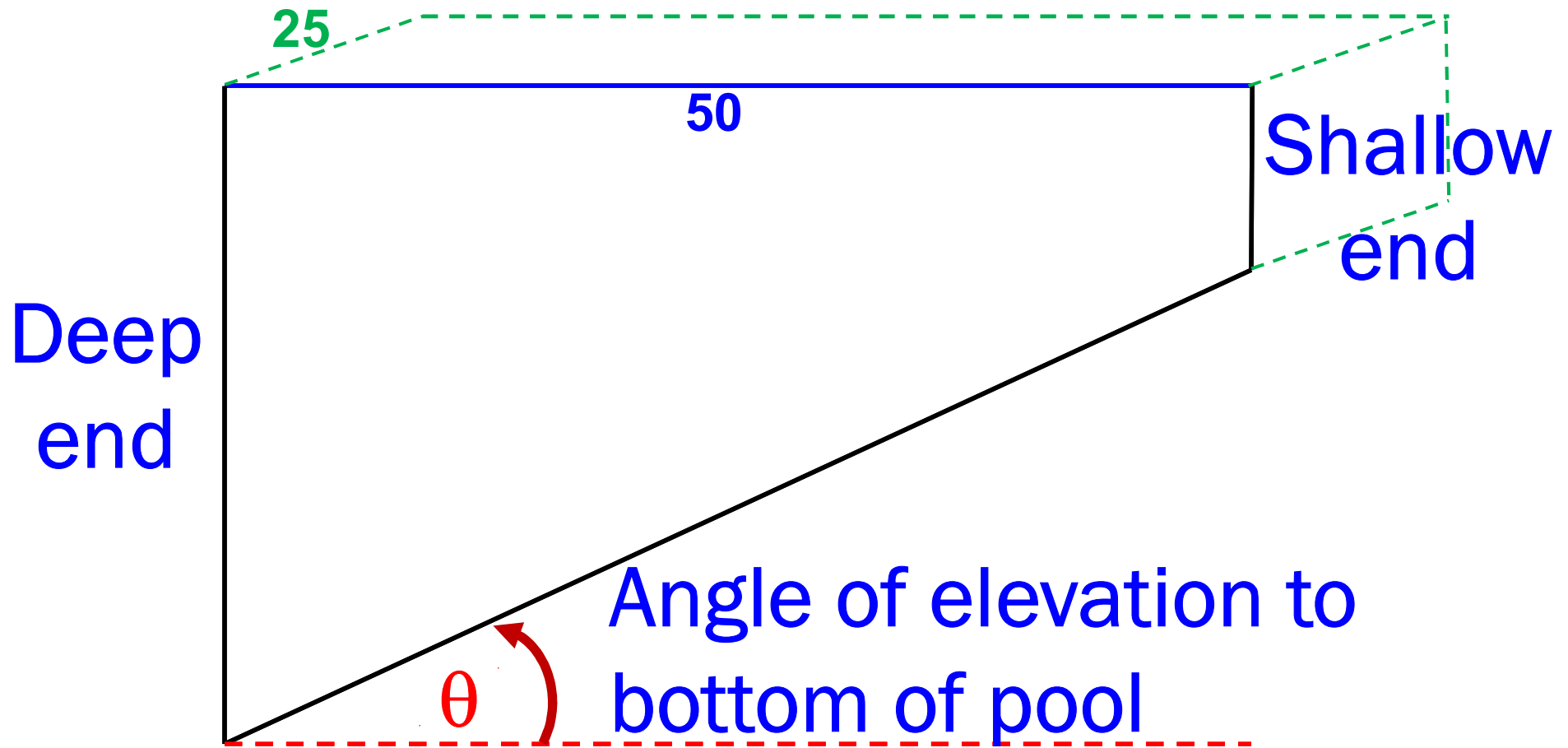
↑ Area of a TRIANGLE

Review2 #12



$$\theta = \frac{360}{8}$$

Review2 #15 → Look at a cross-section of the pool to solve for the angle.



USEFUL TOOLS

$$\sin \theta = \frac{y}{r}$$

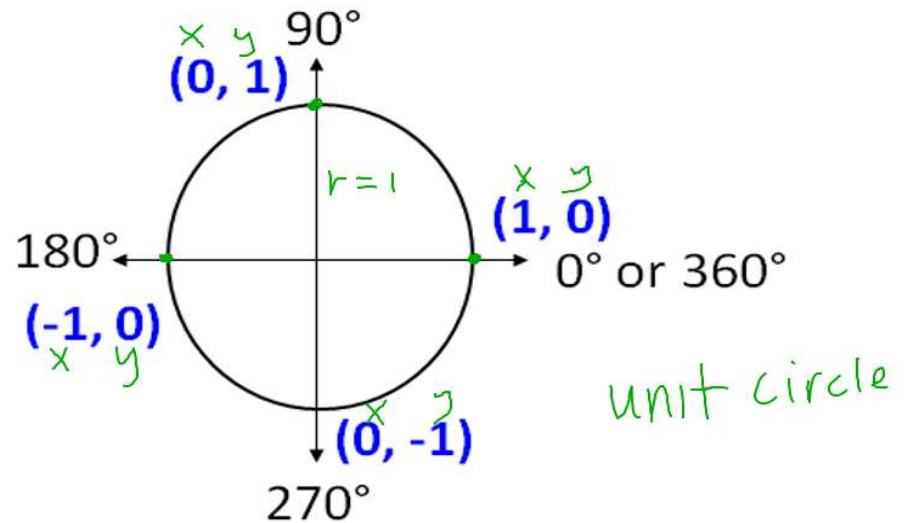
$$\csc \theta = \frac{r}{y}$$

$$\cos \theta = \frac{x}{r}$$

$$\sec \theta = \frac{r}{x}$$

$$\tan \theta = \frac{y}{x}$$

$$\cot \theta = \frac{x}{y}$$



$$r^2 = x^2 + y^2$$

Coterminal Angles

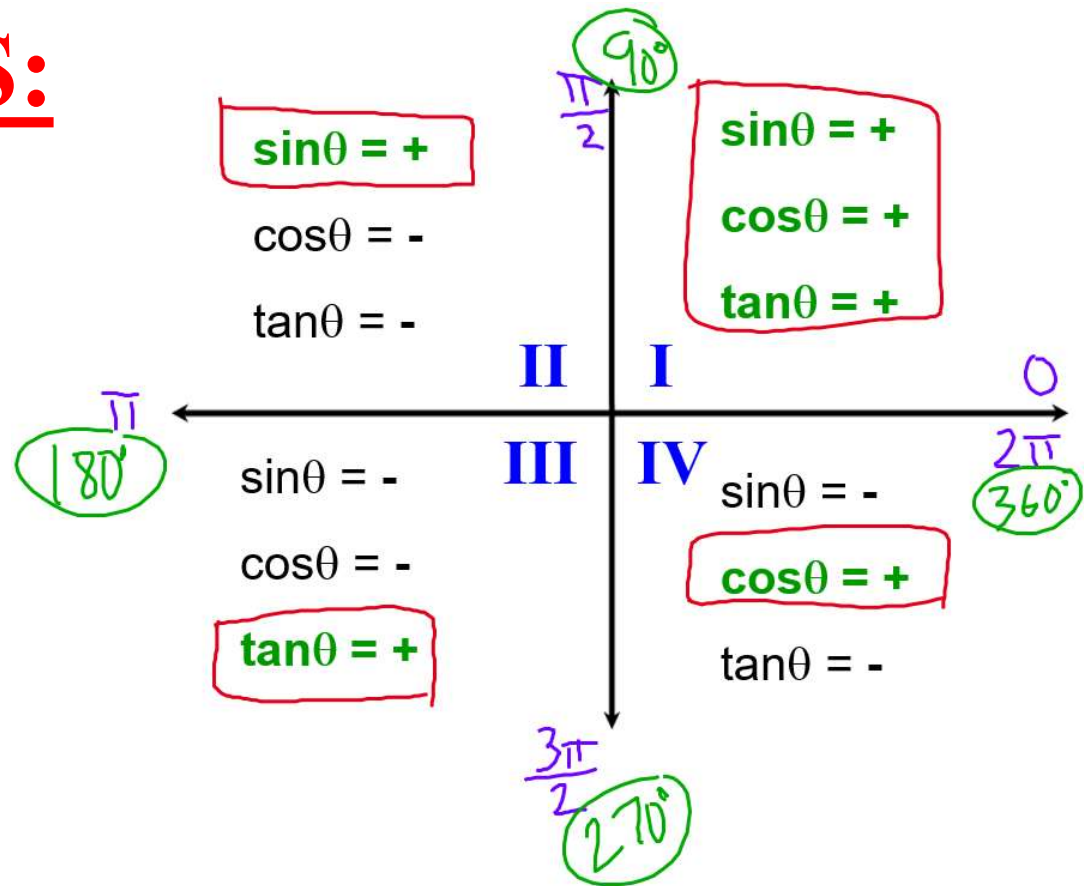
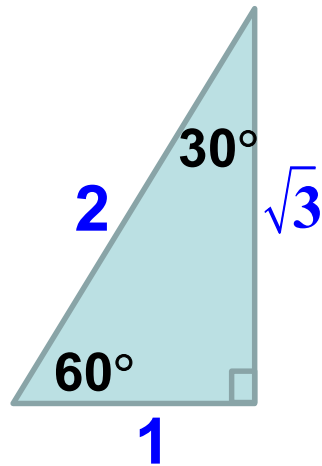
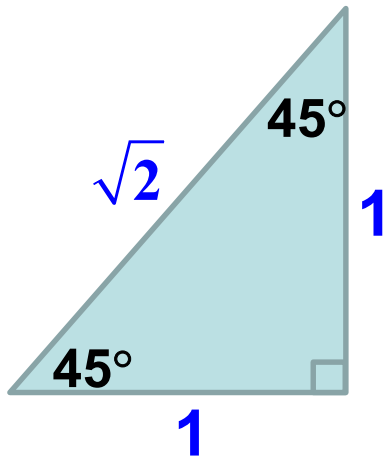
$$\theta \pm 360^\circ(n) \text{ or } \theta \pm 2\pi(n)$$

$$0^\circ \leq \theta < 360^\circ$$

$$0 \leq \theta < 2\pi$$

QUADRANT	REFERENCE ANGLE (DEGREES)	REFERENCE ANGLE (RADIANS)
1	θ	θ
2	$180^\circ - \theta$	$\pi - \theta$
3	$\theta - 180^\circ$	$\theta - \pi$
4	$360^\circ - \theta$	$2\pi - \theta$

USEFUL TOOLS:



Formulas to know for the test!!!

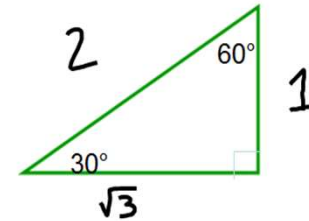
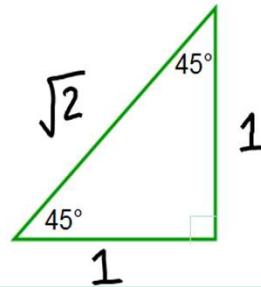
$$\sin \theta = \frac{y}{r}$$
$$\cos \theta = \frac{x}{r}$$
$$\tan \theta = \frac{y}{x}$$

and
reciprocal
functions

$$r^2 = x^2 + y^2$$

$$r = \sqrt{x^2 + y^2}$$

Special triangles:



Law of Cosines:

↓ This side is across from this angle ↓
 $a^2 = b^2 + c^2 - 2bc(\cos A)$

Finding the area of a triangle when the base and height are not given:

$$A = \frac{1}{2}(\text{side 1})(\text{side 2}) \cdot \sin(\text{included angle})$$

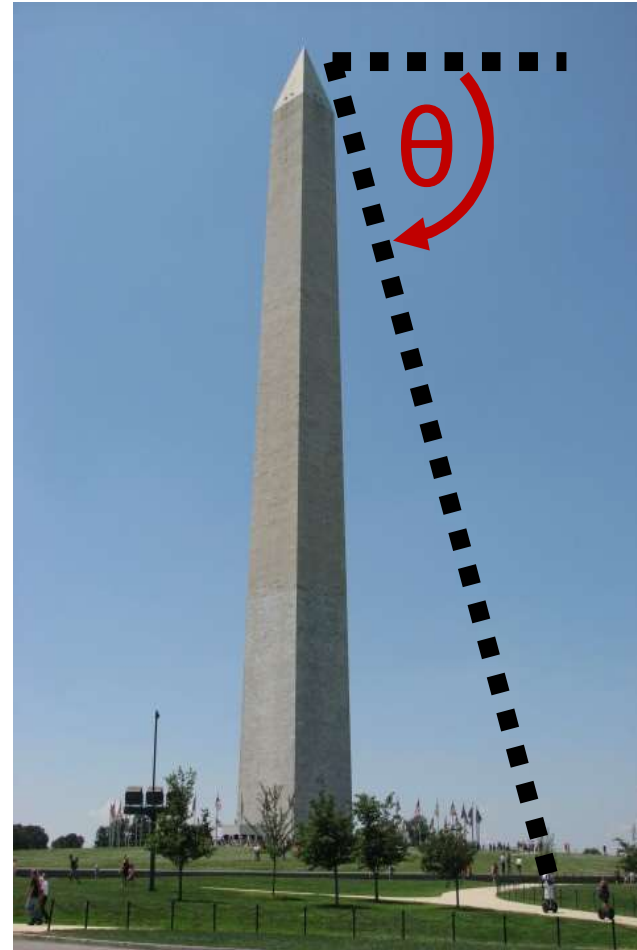
Law of Sines:

$$\frac{\sin A}{a} = \frac{\sin B}{b}$$

Angle of Elevation:



Angle of Depression:



Ch.6 Test: 85 points

Ways to study:

- Read through your ch.6 notes.
- Go over review sheets #1 and #2.
- Rework some of the problems from past assignment and from the end-of-chapter book review.



Reminders:

*make sure diagrams are drawn in the **correct quadrant** and that **negative** values are accounted for!!

*rhombus:

a parallelogram with equal sides.

Ch. 6 Test



85 points

No notes

Ok to use calculator



Reminder: Up to three **missing/incomplete assignments** per unit can be made up at lunch or after school for full credit. They must be turned in by the day of the unit test.

