## Algebra II

12-1
Angles and Degree Measure
Angles in the Standard Position -

Draw an angle in the standard position and label its parts.


Sketch each angle in standard position. Indicate its rotaion by a curved arrow. Classify each angle by its quadrant. If the angle is a quadrantal angle, say so.
1 a) $135^{\circ}$
b) $-135^{\circ}$

Quadrantal angle -


Sketch in standard position the angle described and then find its measure.
13) $\frac{2}{3}$ of a counterclockwise revolution


Sketch each angle in standard position when $\mathrm{n}=0, \mathrm{n}=1, \mathrm{n}=2$, and $\mathrm{n}=-1$.
19) $45^{\circ}+360^{\circ} \cdot \mathrm{n}$


## Coterminal angles -

For the following,
a) Write a formula for the measures of all angles coterminal with the given angle.
b) Use the formula to find two angles, one positive and one negative, that are coterminal with the given angle.
23) $35^{\circ}$

Express in degrees to the nearest tenth of a degree.
31) $15^{\circ} 30^{\prime}$

Express in degrees and minutes to the nearest minute.
39) $25.4^{\circ}$

Express in degrees, minutes, and seconds to the nearest second.
43) $34.41^{\circ}$

Assignment:
Pg. 552
2-46 even

