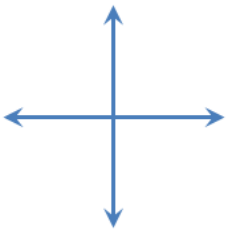
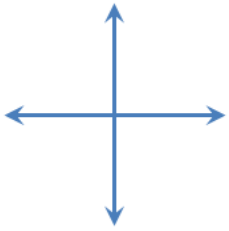
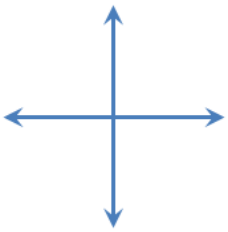
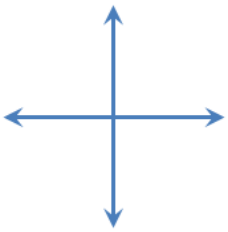
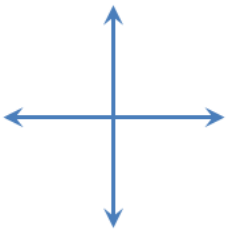
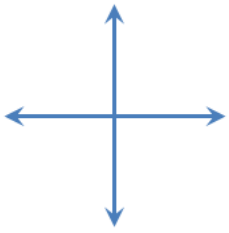
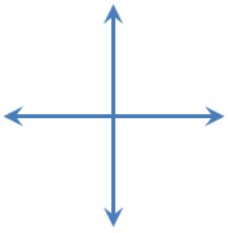
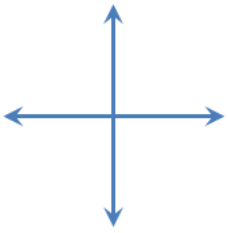
Name:_____ Date:_____

Pre-Calculus 11: HW 2.1 Angles in Standard Position

1. Draw each angle in standard position then find the value of the reference angle:

a) $120°$  Reference Angle:	b) $-300°$  Reference Angle:	c) $235°$  Reference Angle:	d) $-420°$  Reference Angle:
e) 800°  Reference Angle:	f) $1000°$  Reference Angle:	g) $-500°$  Reference Angle:	h) $-3000°$  Reference Angle:

2. Given each pair of angles, indicate whether if they are co-terminal. Show your work to justify your answer:

a) $35°,\ 695°$	b) $900°, 330°$	c) $720°, 1080°$
d) $-475°, 605°$	e) $-2590°, 290°$	f) $1825°, 375°$

3. What does it mean that an angle is in standard position? Explain:

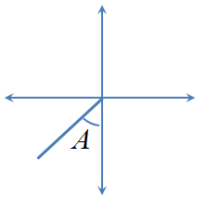
4. What is the smallest positive co-terminal angle of 2000°? Which quadrant is it in?

5. Give a general formula for all the co-terminal angles of -5200°

6. Write a general formula for all co-terminal angles of a) $75°$ b) $-200°$

7. An angle in quadrant 3 has a reference angle of 31°. If the angle is greater than 600°, then what is the smallest possible answer?

8. Given that angle "A" is $47°$, what is the value of the angle in standard position?



9. Angle "x" is between $0°$ and $360°$, and has a reference angle of $24°$. What are all the possible values of angle "x"?