Warm Up:
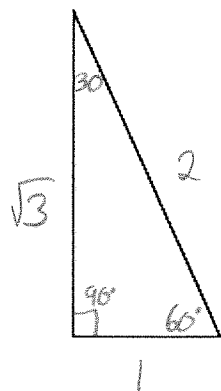
a. Label the side lengths and the angles in the 30-60-90 triangle below. Find the trig ratios for $sin(60°)$, $cos(60°)$, $and\ tan(60°)$.

b. Using the book's glossary, define Reference Angle and Reference Triangle.

(Do this)

$Sin(60°) = \frac{\sqrt{3}}{2}$

$Cos(60°) = \frac{1}{2}$

$Tan(60°) = \sqrt{3}$

1. What is $sin(120°)$, $cos(120°)$, $and\ tan(120°)$?

Reference Triangle

$Sin(60°), Cos(60°), Tan(60°)$

$\frac{\sqrt{3}}{2}$ $\frac{1}{2}$ $\sqrt{3}$

$Sin(120°), Cos(120°), Tan(120°)$

$\frac{\sqrt{3}}{2}$ $\frac{-1}{2}$ $\frac{\sqrt{3}}{-1} = -\sqrt{3}$
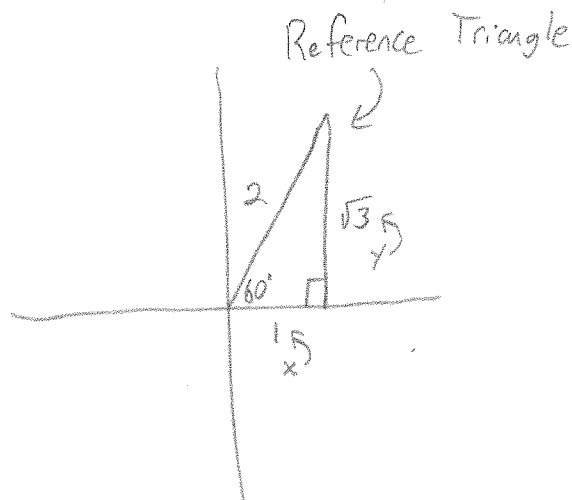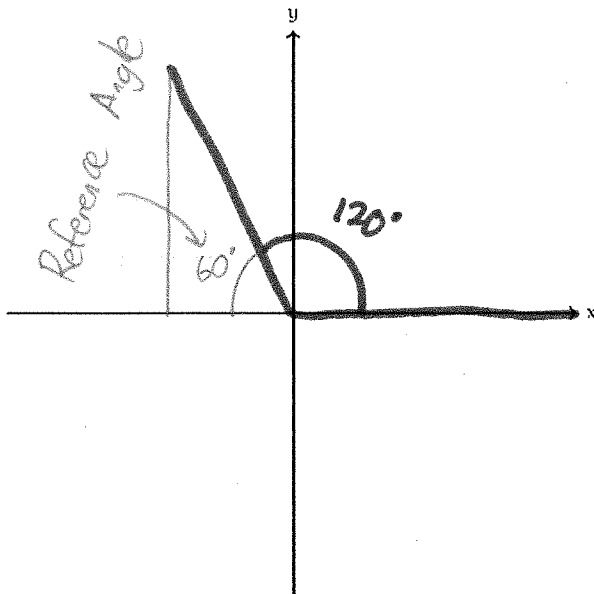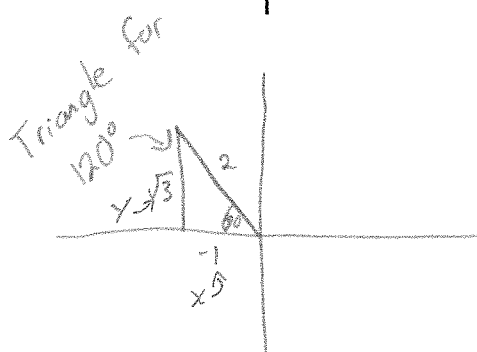
*If we know values for reference angle, then we know for many others.