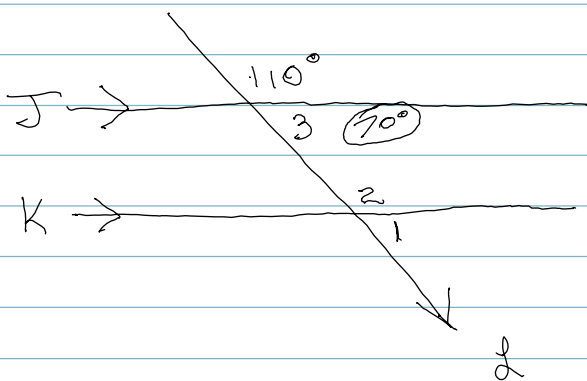


Day 10: Parallel lines cont.

given the following diagram



given: $J \parallel K$ with
transversal l

find the measure of $\angle 1$

way #1

$$\begin{array}{r} 110^\circ + \angle 3 = 180^\circ \text{ (supplementary linear pair)} \\ -110^\circ \qquad -110^\circ \\ \hline \angle 3 = 70^\circ \end{array}$$

$\angle 3 = \angle 1$ because corresponding \angle 's of parallel lines are equal

$$\angle 1 = 70^\circ$$

way #2

$$\begin{array}{r} 110^\circ = \angle 2 \text{ because corresponding } \angle \text{'s of parallel lines are equal} \\ \downarrow \swarrow \text{ (linear pair)} \\ \angle 2 + \angle 1 = 180^\circ \text{ (supplementary } \angle \text{'s)} \end{array}$$

$$\begin{array}{r} 110^\circ + \angle 1 = 180^\circ \\ -110^\circ \qquad -110^\circ \\ \hline \boxed{\angle 1 = 70^\circ} \end{array}$$