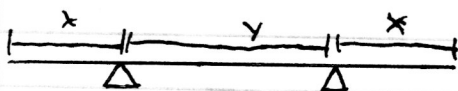
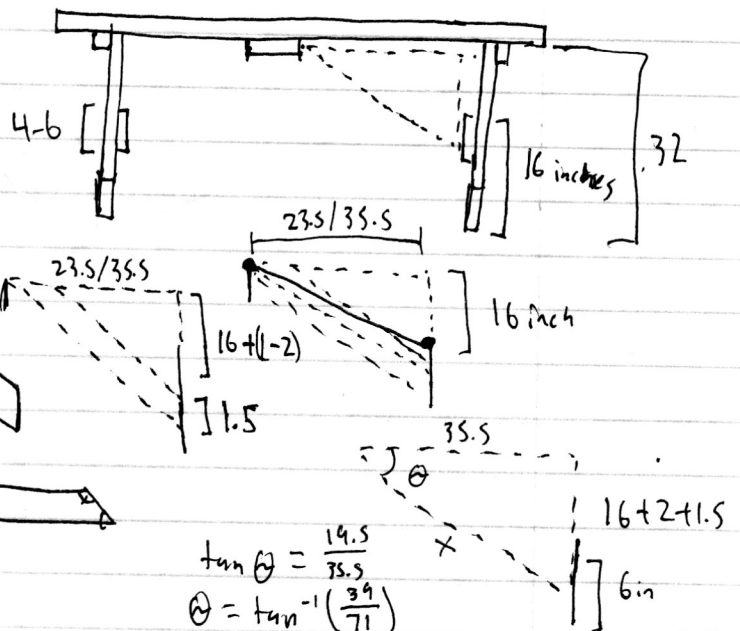
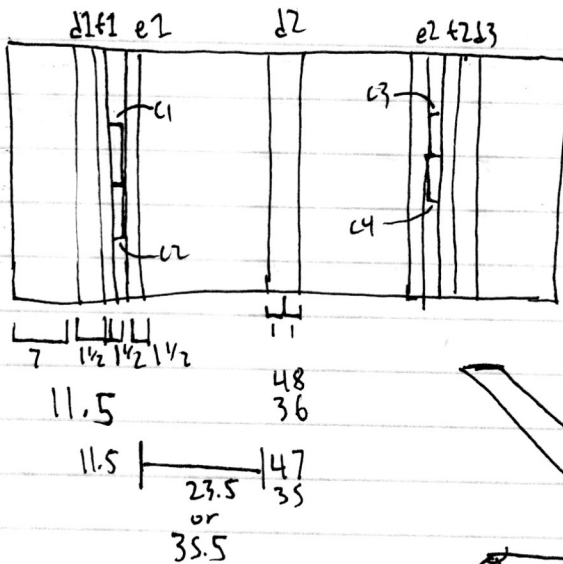
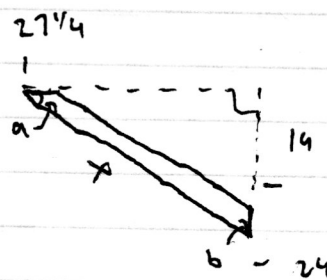


$\tan 30 = \frac{y}{6}$
 $y = 6 \tan 30$
 $y = 3.46$

$\sin 60 = \frac{h}{y-3.46}$
 $h = (y-3.46) \sin 60$
 $h(40.5) = \sin 60 \cdot 37.04$
 $= 32.08 \text{ inches}$



$L: 24 \frac{1}{4}$ $H: 21-26$
 $27 \frac{1}{4}$ $19-24$



$\tan \theta = \frac{14.5}{35.5}$
 $\theta = \tan^{-1}(\frac{39}{71})$
 $= 28.78$
 $\sin(28.78) = \frac{14.5}{x}$
 $x = \frac{14.5}{\sin 28.78} = 40.5$
 $(27 \frac{1}{4})^2 + 36^2 = 23.525$

$x = \sqrt{(27 \frac{1}{4})^2 + (6)^2}$
 $= (747.5625 + 441)^{1/2}$
 $= \sqrt{1188.5625}$
 $= 34.47 \rightarrow 36$

$\sin \theta_2 = \frac{23.525}{36}$
 $\theta_2 = 40.23^\circ$
 $\cos \theta_3 = \frac{23.525}{36} = 49.2$