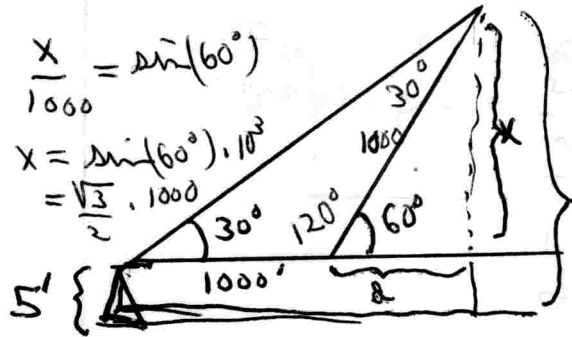




$$h = x + 5' \approx 866.025 + 5 \approx 871.03$$

(1) $\tan(60^\circ) = \frac{x}{d}$ and (2) $\tan(30^\circ) = \frac{x}{d+1000}$

(1) $\Rightarrow d = \frac{x}{\tan(60^\circ)}$
 (2) $\Rightarrow x = (d + 1000) \tan(30^\circ)$
 $\therefore x = \left(\frac{x}{\tan(60^\circ)} + 1000 \right) \tan(30^\circ)$