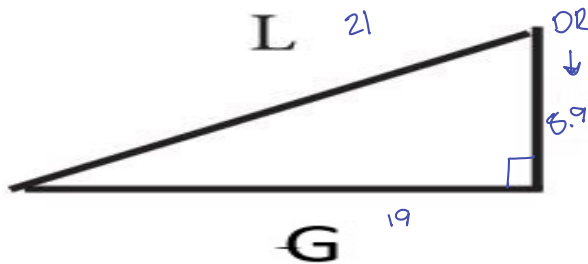


Name: Rhyan Bullard

Given the inclined plane pictured below, when L (slope length) = 21 feet, G (Ground length of slope) = 19 feet, Fe = 30, Fr = 56 what is the a: IMA b: AMA c: Efficiency (precision of 0.01)?



$$\begin{aligned}a^2 + b^2 &= c^2 \\ 19^2 + b^2 &= 21^2 \\ b^2 &= 21^2 - 19^2 \\ b^2 &= 80 \\ b &= 8.9\end{aligned}$$

$$IMA = \frac{DE}{DR} = \frac{21}{8.9} = 2.34$$

$$AMA = \frac{FR}{FE} = \frac{56}{30} = 1.87$$

$$\text{Efficiency} = \frac{1.87}{2.34} (100) = 79.91$$

Write ONLY answers below this line _____

Set52

a: 2.34

b: 1.87

c: 79.91