



The tree is about 96.59 ft tall.

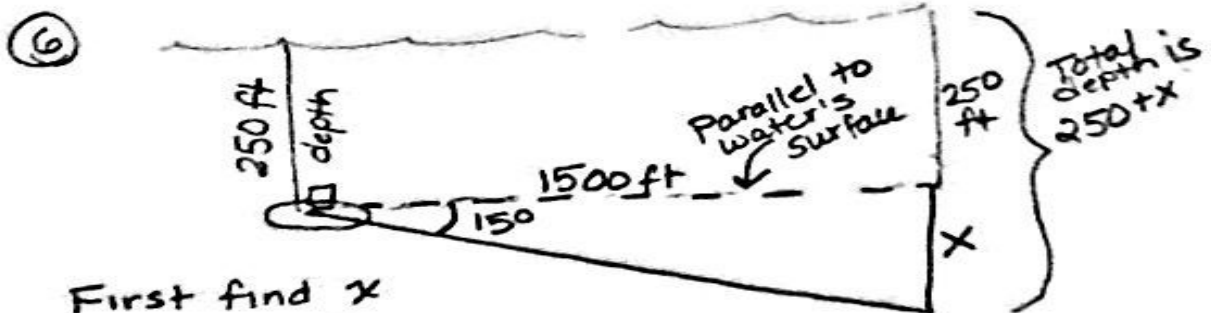
$$\sin 75 = \frac{y}{100}$$

$$100 \cdot \sin 75 = \frac{y}{100} \cdot 100$$

$$100 \sin 75 = y$$

$$96.59 \approx y$$

⑤ This problem was worded badly so please skip it.



First find x

$$\tan 15^\circ = \frac{x}{1500}$$

$$1500 \tan 15 = \frac{x}{1500} \cdot 1500$$

$$1500 \tan 15 = x$$

Total Depth of Submersible

$$TD = 1500 \tan 15 + 250$$

$$\approx 651.92 \text{ feet}$$

* Notice NO rounded # in the middle of a problem