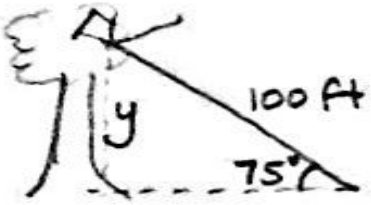
④



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

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

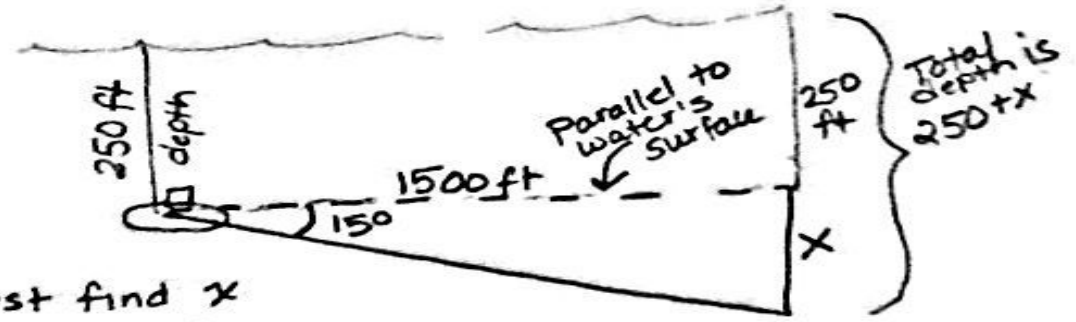
$100 \sin 75 = y$

$96.59 \approx y$

The tree is about 96.59 ft tall.

⑤ This problem was worded badly so please skip it.

⑥



First find x

$\text{Tan } 15° = \frac{x}{1500}$

$1500 \text{Tan } 15 = \frac{x}{1500} \; 1500$

$1500 \text{Tan } 15 = x$

Total Depth of Submersible

$TD = 1500 \text{Tan } 15 + 250$

≈ 651.92 feet

* Notice NO rounded # in the middle of a problem