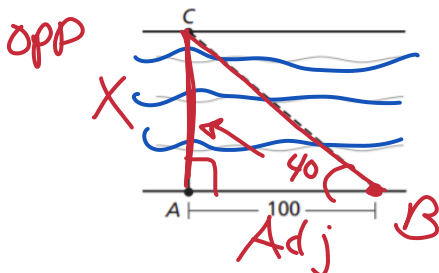


Trigonometry Homework

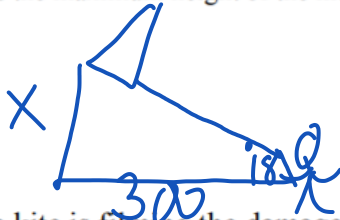
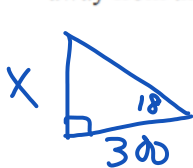
Tuesday, March 1, 2022 8:14 AM

8. An environmentalist wants to measure the width of a river to monitor its erosion. From point A , she walks downstream 100 feet and measures the angle from this point to point C to be 40° .

a. How wide is the river? Round to the nearest tenth.

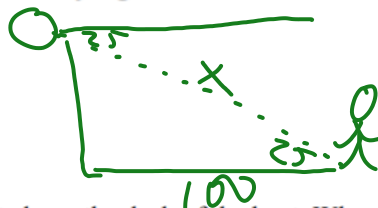
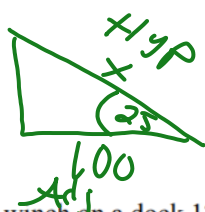


9. A boy flies a kite at an angle of elevation of 18° . The kite reaches its maximum height 300 feet away from the boy. What is the maximum height of the kite? Round to the nearest tenth.

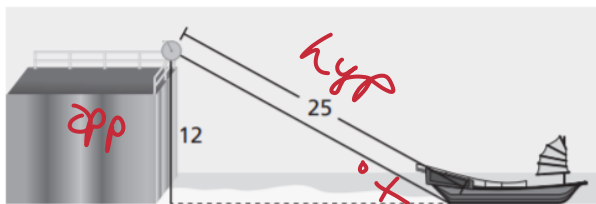


14. A camera attached to a kite is filming the damage caused by a brush fire in a closed-off area. The camera is directly above the center of the closed-off area.

a. A person is standing 100 feet away from the center of the closed-off area. The angle of depression from the camera to the person flying the kite is 25° . How long is the string on the kite?



11. A boat is pulled in by a winch on a dock 12 feet above the deck of the boat. When the winch is fully extended to 25 feet, what is the angle of elevation from the boat to the winch?



\sin^{-1}