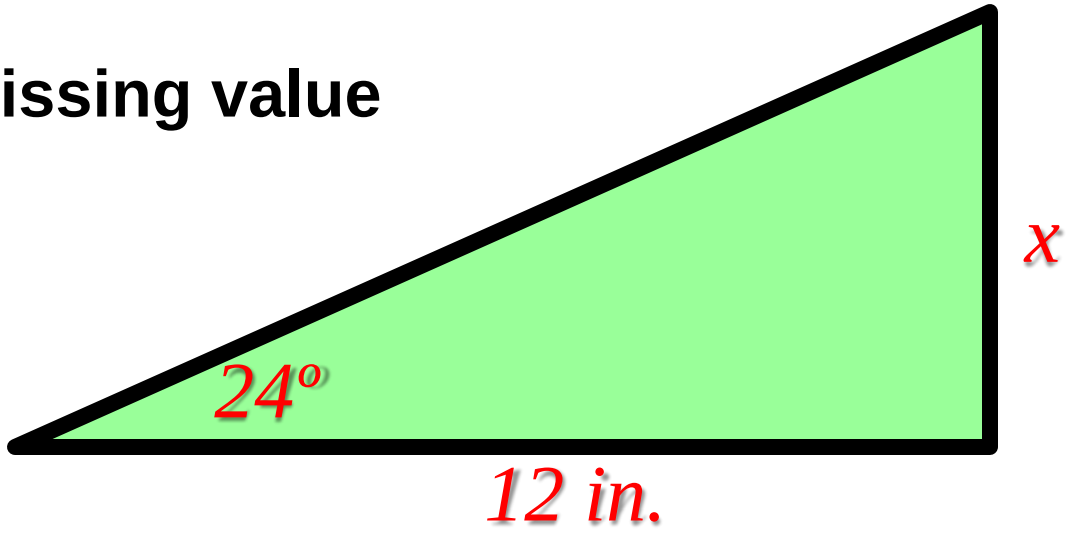
8.8

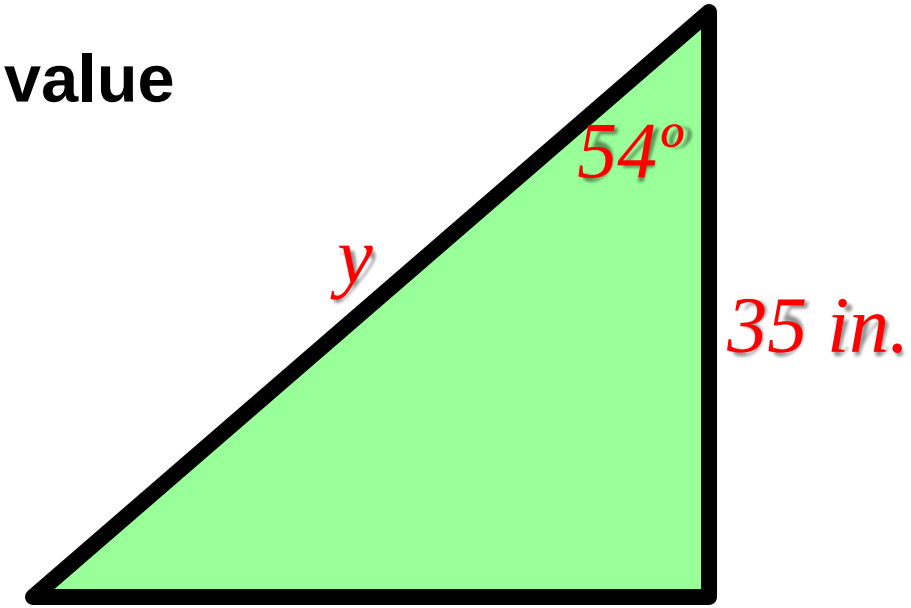
Right Triangle Trigonometry

DO NOW

1) Find the missing value

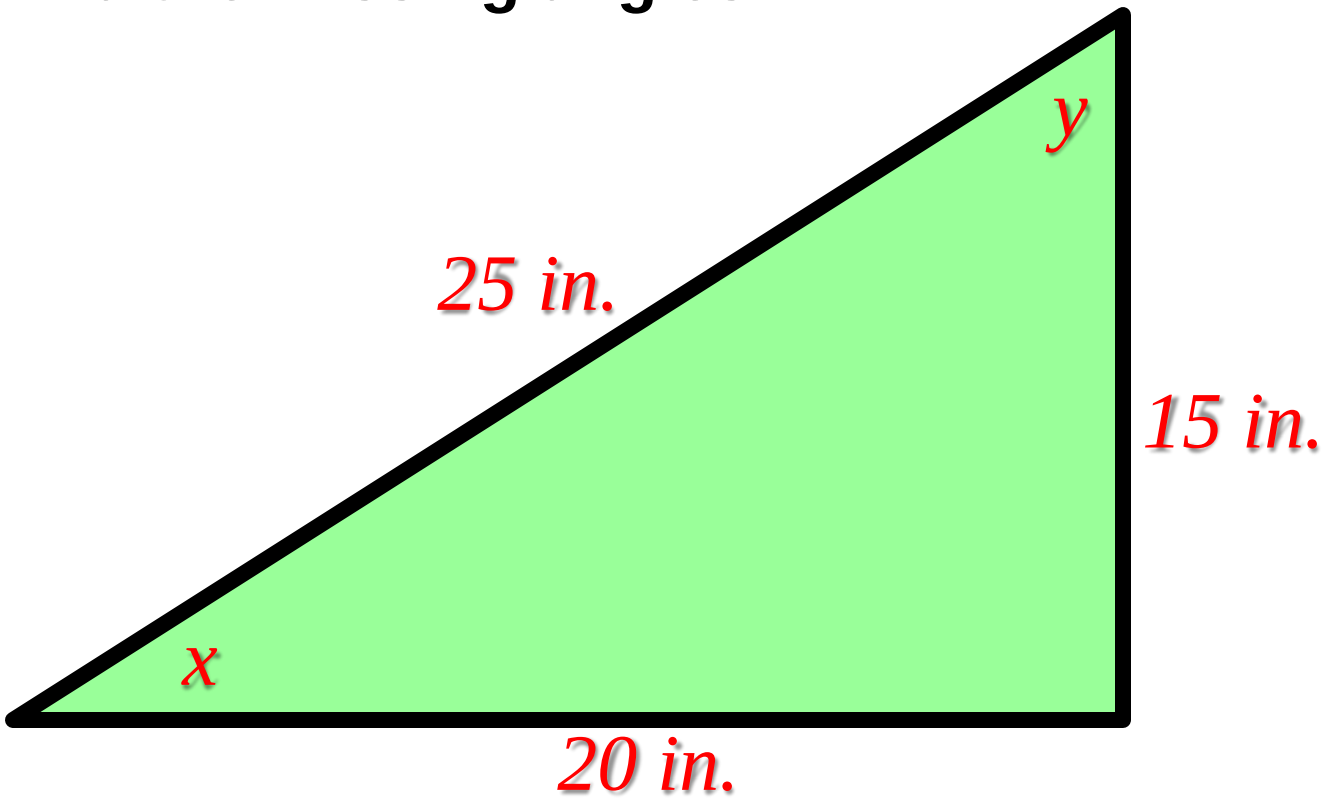


2) Find the missing value

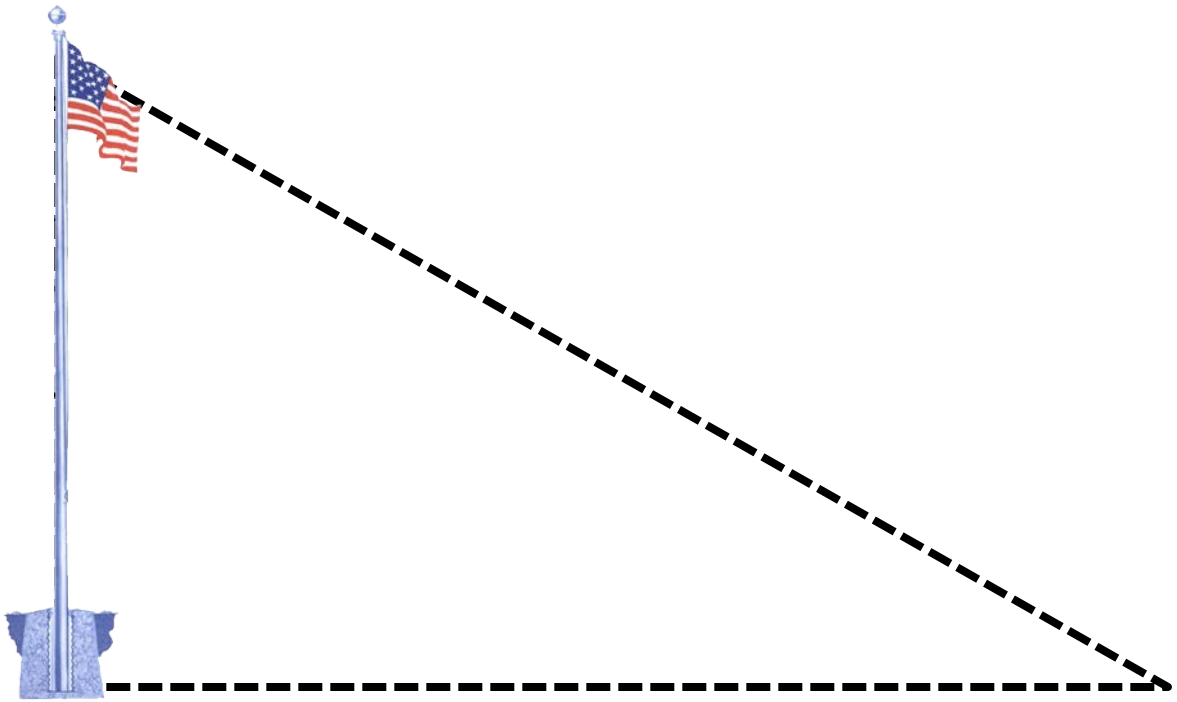


DO NOW

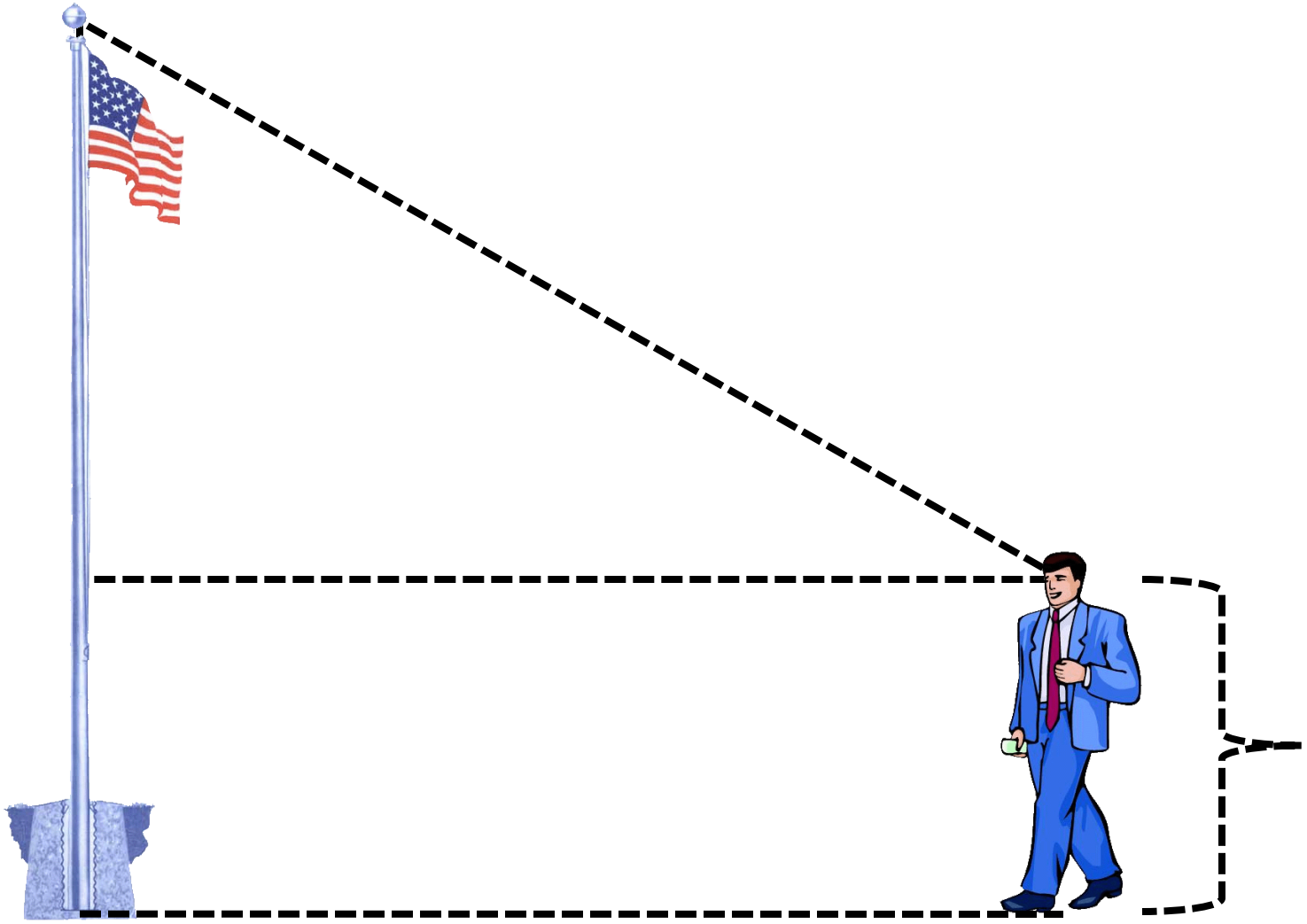
3) Find the missing angles



1) Find the height of the flagpole below

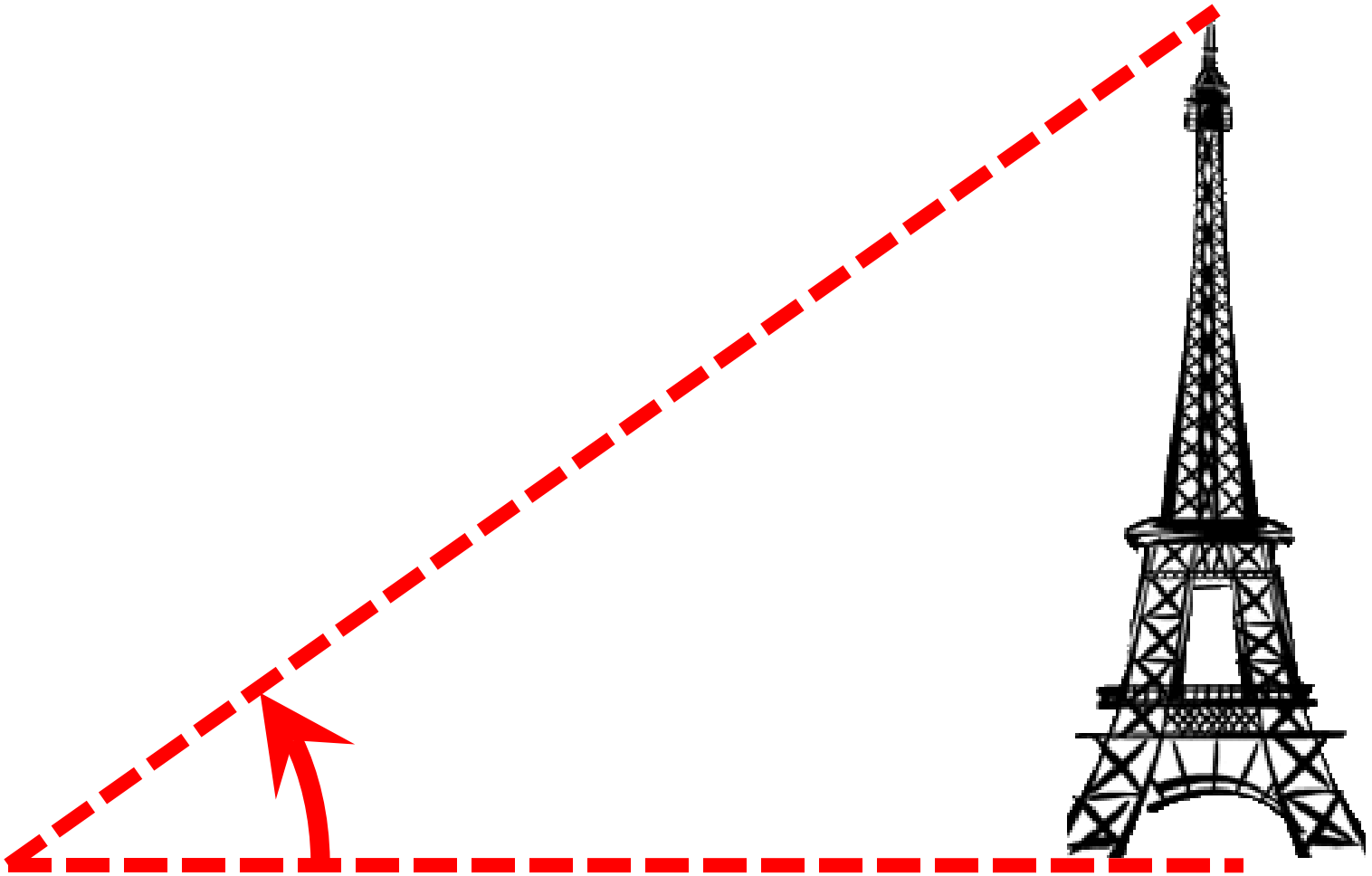


2) Find the height of the flagpole below if a 5-foot person views it.

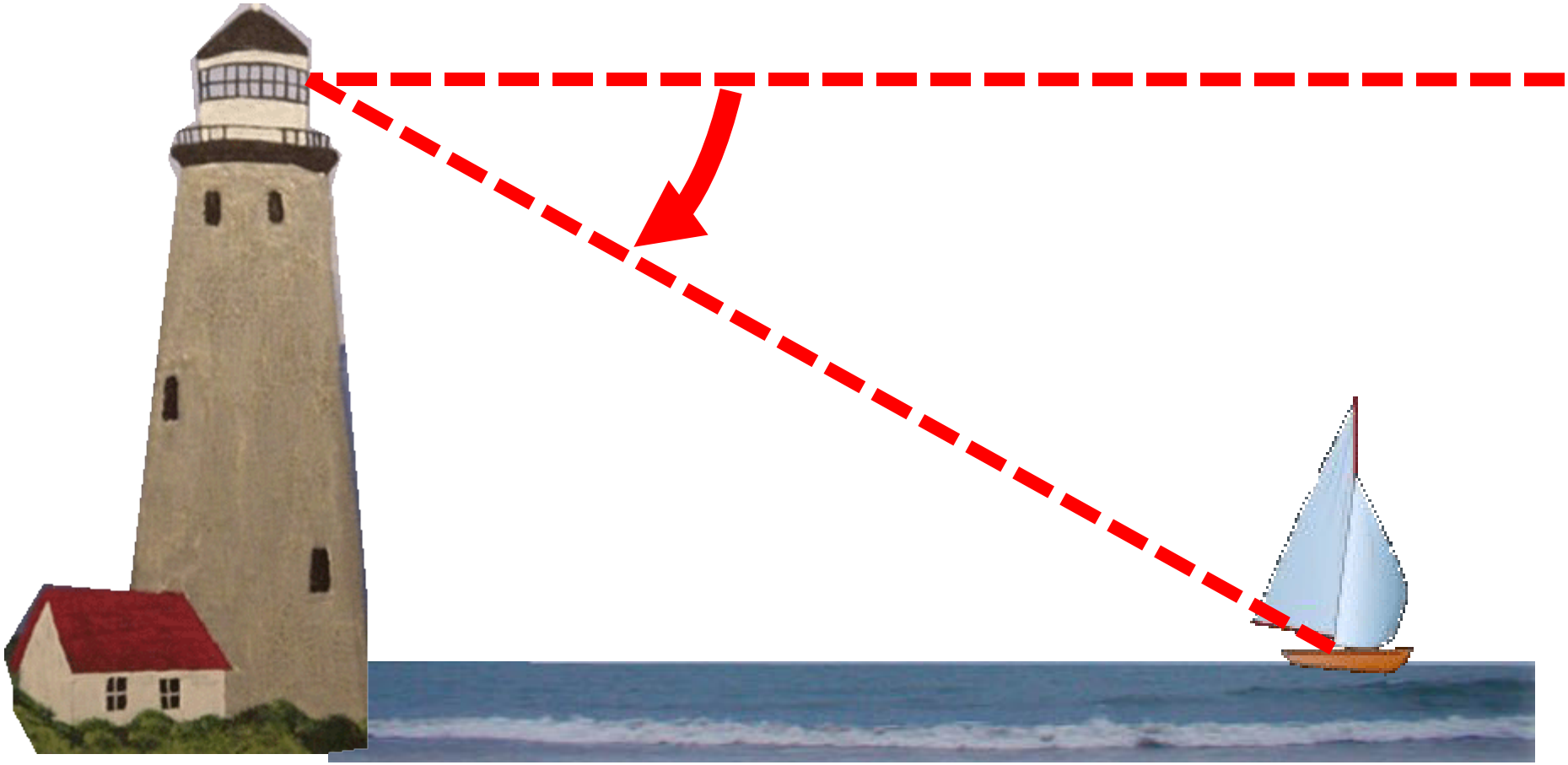


VOCABULARY

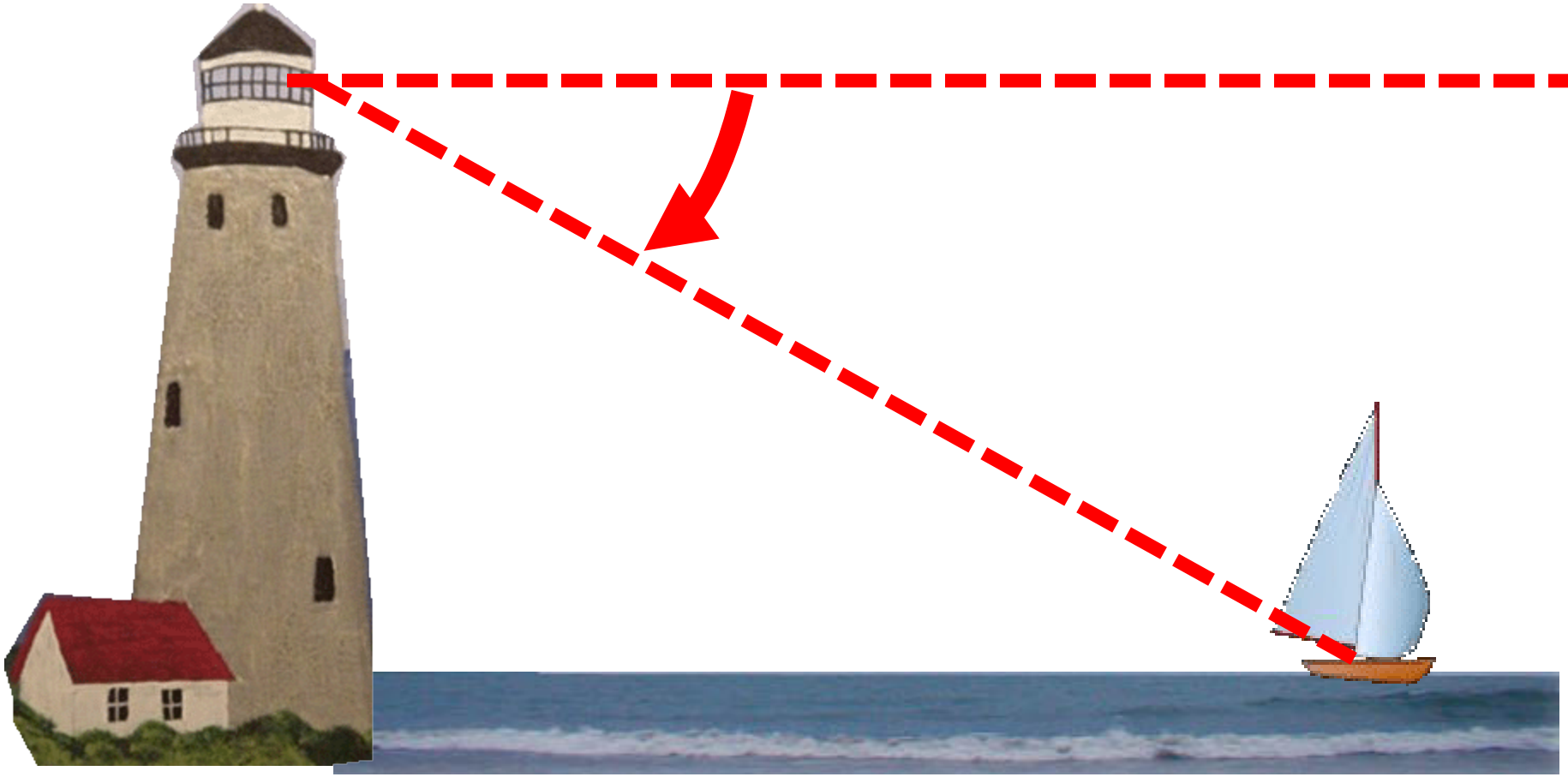
VOCABULARY



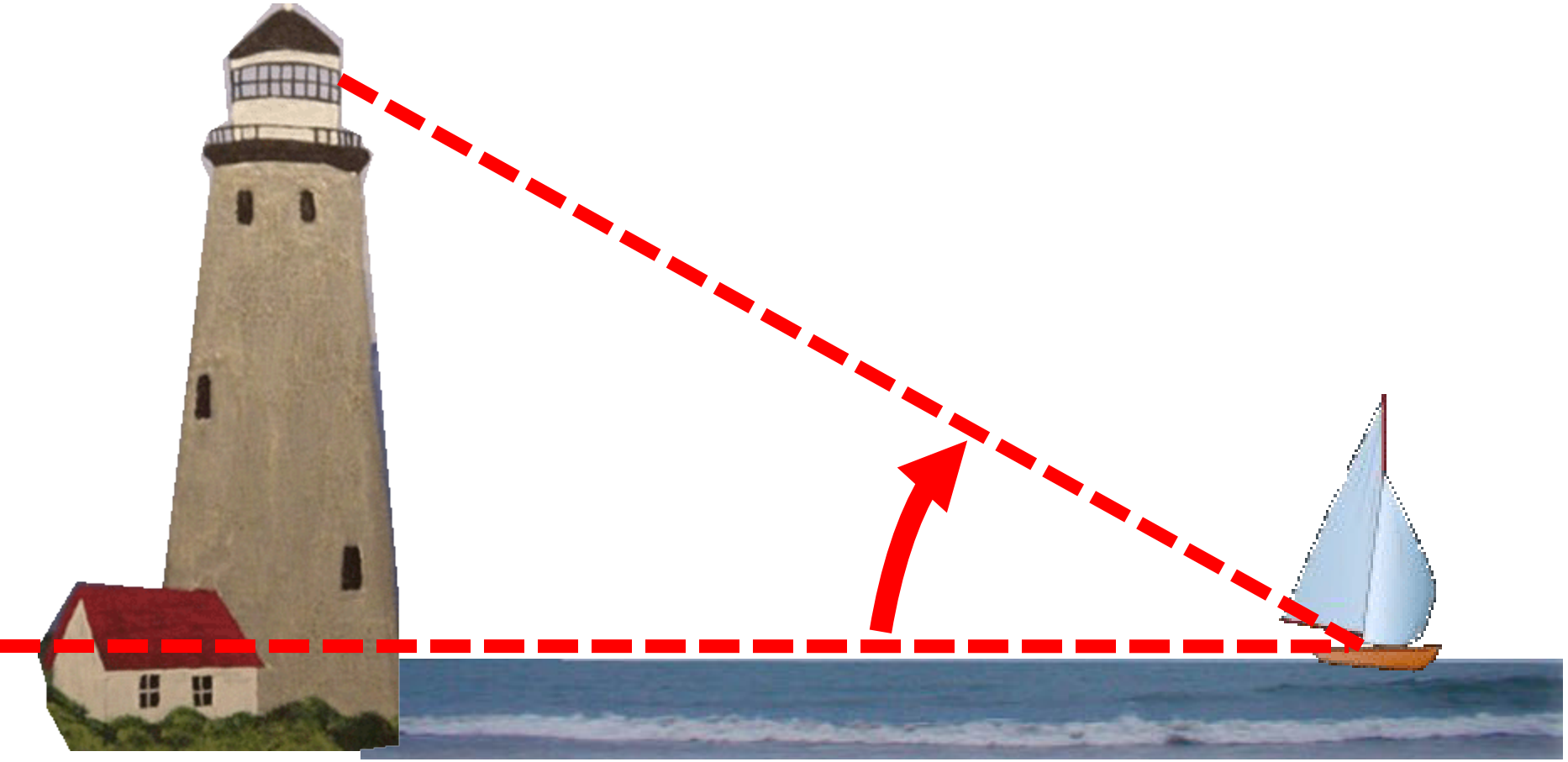
VOCABULARY



3) A person at the top of a lighthouse sights a boat in the water. The angle of depression is 50º. If the lighthouse is 70 feet hight, find the distance from the base of the lighthouse to the boat.



4) A person in a boat sights the top of a lighthouse at an angle of 70º. If the lighthouse is 40 feet tall, find the distance from the foot of the lighthouse to the boat.



5) Suppose for maximum safety, a ladder should be placed against a wall at a 75 angle with the ground. If the ladder is 14 feet long, how far from the wall should the foot of the latter be placed?