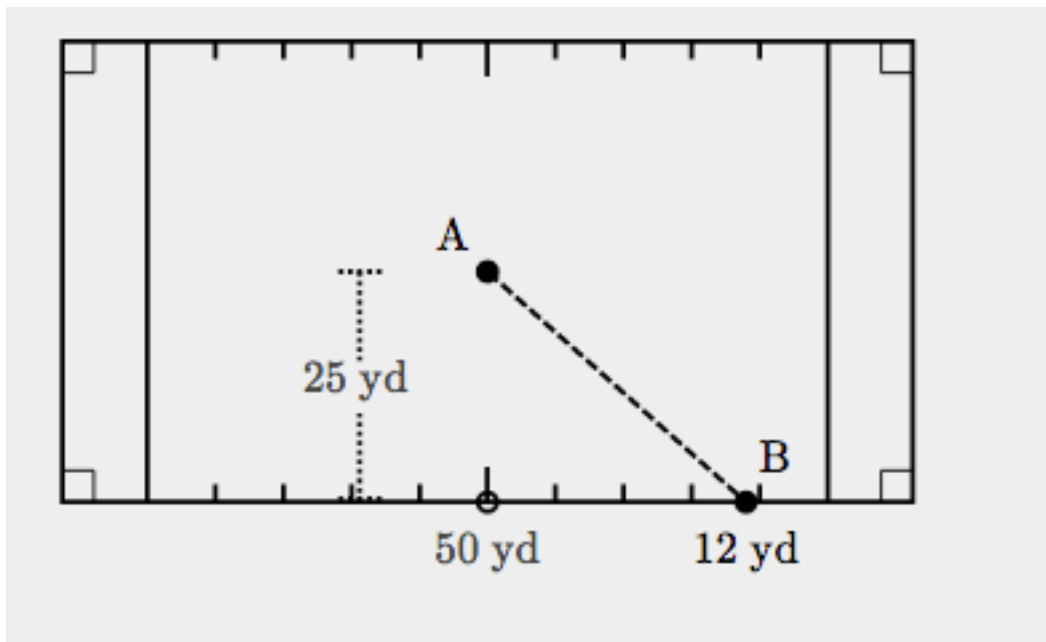


Right triangle word problems

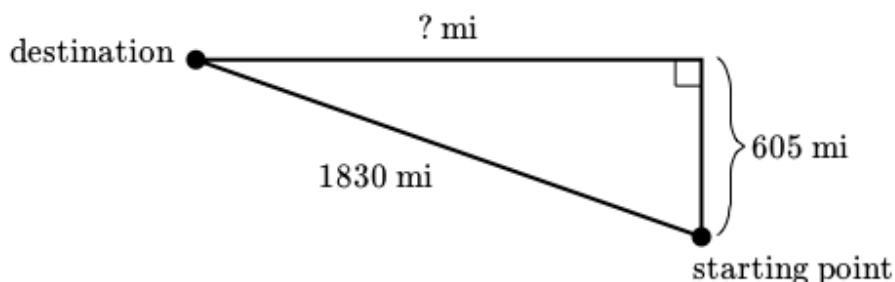


Abby is buying a rectangular widescreen TV that she will hang on the wall between two windows such that the longer side of the TV is horizontal. The windows are 36 inches apart horizontally, and a wide screen TV is approximately twice as wide as it is tall. Of the following, which is the longest that the diagonal of a widescreen TV can measure and still fit between the windows?

- A 32 inches
- B 42 inches
- C 55 inches
- D 60 inches

Two football players are located at points A and B in a rectangular football field as shown at left. Point A is located 50 yards (yd) from the west edge and 25 yd from the south edge; Point B is located 12 yd from the east edge and 0 yd from the south edge. What is the distance, in yards, between the two players? (Round your answer to the nearest tenth of a yard.)

Right triangle word problems



Due to weather, a barge captain decides to reach her destination in two legs: one due north and one due west. On a direct route, her destination is about **1,830 miles (mi)** away; see the figure above. If after traveling **605 mi** due north the captain determines it is time to head due west, how many more miles are left in the trip? (Round the answer to the nearest mile.)

Bilal is assembling a set of bunkbeds and wants to make sure the support posts are perpendicular to the floor. He measures that the posts are **165 centimeters (cm)** tall and **220 cm** apart. How long should the diagonal measurement be, in **cm**, if the support posts are perpendicular to the floor?

(A) 75

(B) 130

(C) 275

(D) 385

Wanahon is cooking a breadstick on a rectangular baking sheet measuring $9\frac{1}{2}$ inches (in) by **13 in**. Assuming the breadstick width is negligible, what is the longest breadstick Wanahon could bake by fitting it straight along the diagonal and within the baking sheet to the nearest inch?

(A) 13 in

(B) 16 in

(C) 124 in

(D) 259 in
