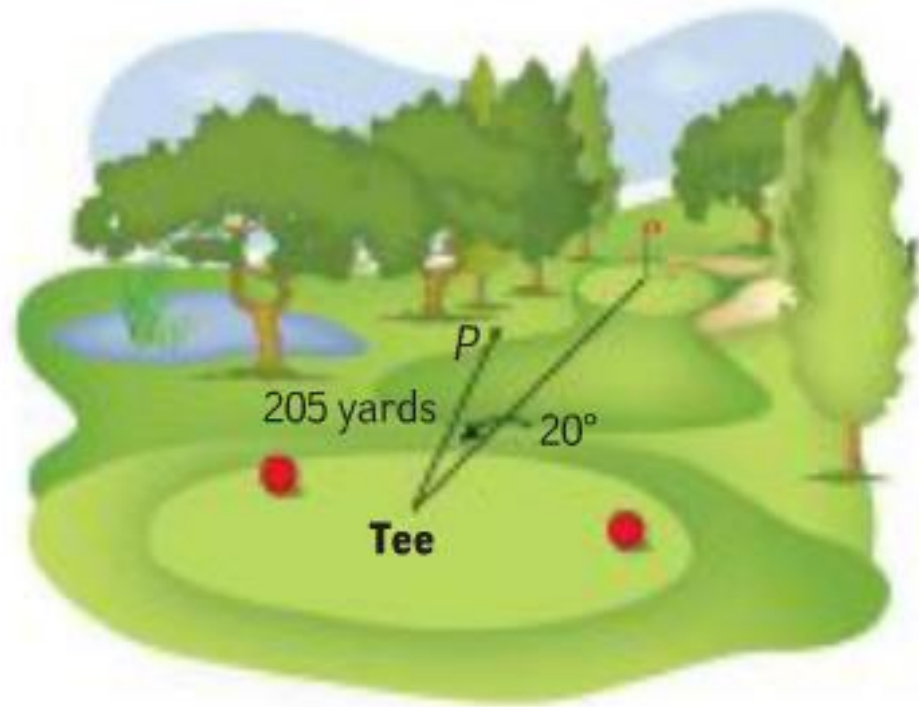


#1 Suppose in a triangle  
 $c=5.4\text{m}$ ,  $\angle A=58^\circ$  and  
 $\angle B=42.8^\circ$ . Find the three  
unknown parts.

#2 Suppose in a triangle  
 $a=12.9\text{in.}$ ,  $b=16.3\text{in.}$  and  
 $c=8.8\text{in.}$  Find the three  
unknown parts.

# #3

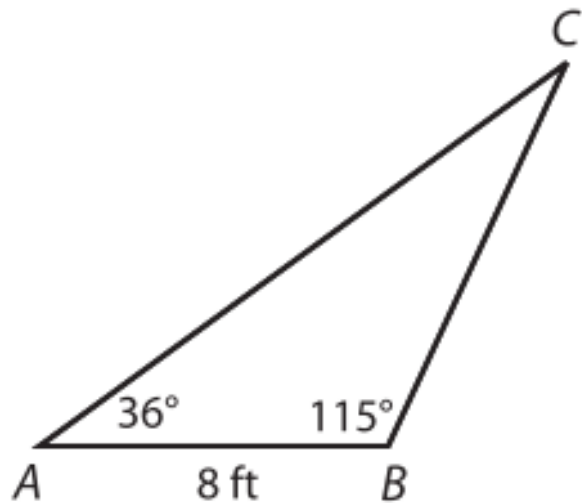
The ninth hole at Duffy's Golf Club is 325 yards down a straight fairway. In his first round of golf for the season, Andy tees off and hooks the ball  $20^\circ$  to the left of the line from the tee to the hole. The ball stops 205 yards from the tee at point  $P$ , as shown in the figure.



- How far is his ball from the hole (marked by the flag)?
- To decide which club to use on his next shot, Andy knows he hits an average of 135–145 yards with a five iron; with a four iron, he hits 145–155 yards; and with a three iron, he hits 155–165 yards. Which of these clubs would be his best choice?

# #4

Consider  $\triangle ABC$  as shown below. Find the lengths of the other two sides of the triangle.

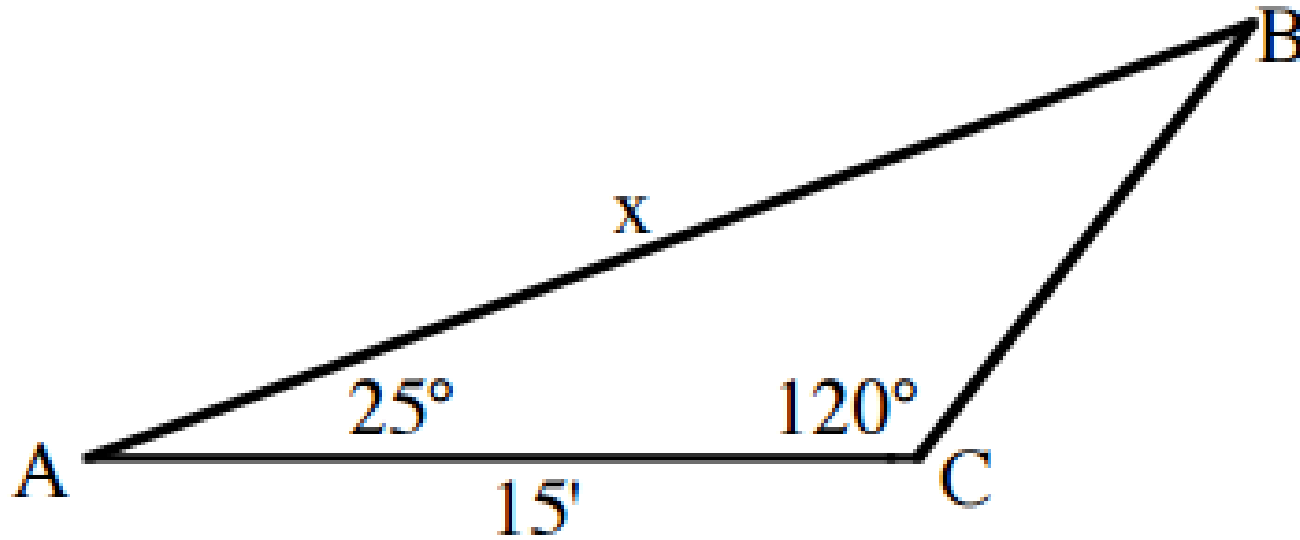


# #5

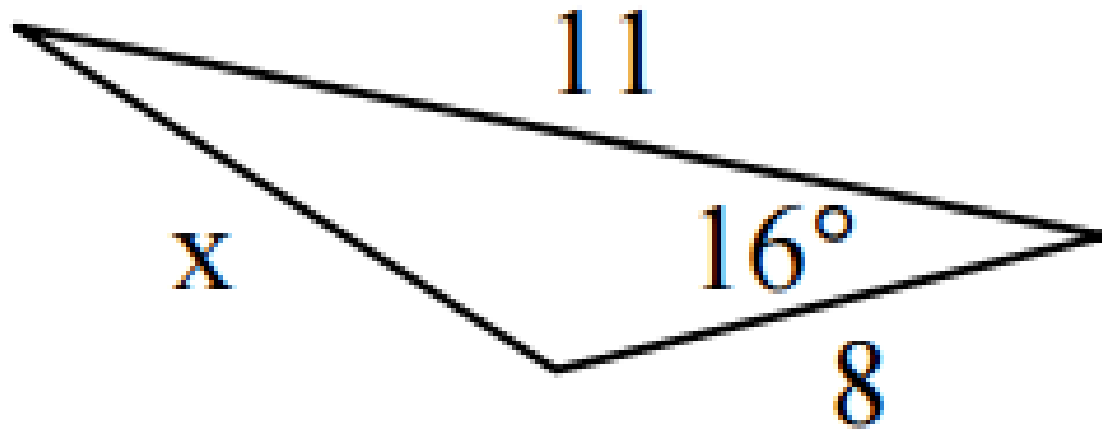
In route to sea, a freighter travels 50 km due west of its home port. It then turns, making an angle of  $132^\circ$  with its former path. It travels 80 km before radioing its home port.

- a. Draw a diagram showing the path of the freighter.
- b. How far is the freighter from its home port?

#6 Find the missing side.

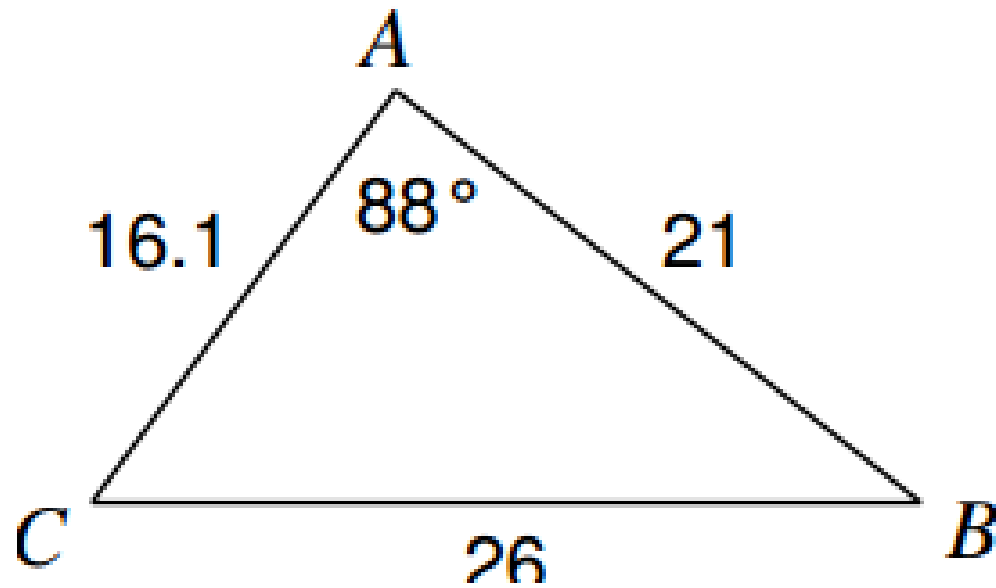


#7 Find the missing side.



#8 Find the measure of

$\angle C$ .





#9 Find the measure of

$\angle A$ .

