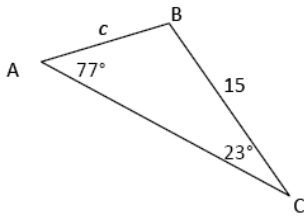


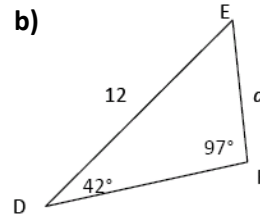
8.1 Sine Law Homework #2

1. Find the length of the indicated side for each triangle

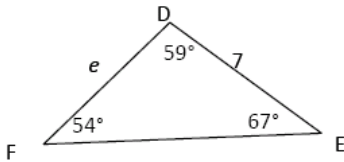
a)



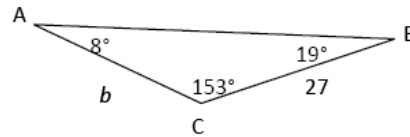
b)



c) Find the length of 'e'



d) Find the length of 'b'

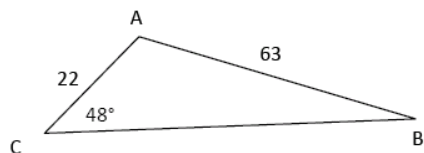


e) For $\triangle DEF$, $d=24$, Angle D = 37° ,
Angle E = 49° . Find the length of 'e'

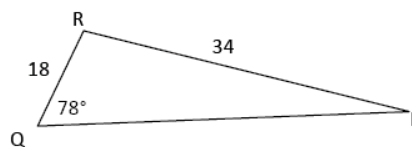
f) For $\triangle XYZ$, $x=17$, Angle X = 24° ,
Angle Y = 44° , Find the length of 'z'

2. Find the measure of the indicated angle in each triangle

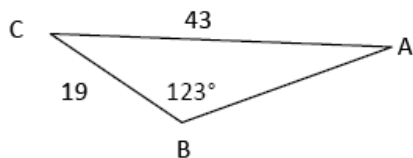
a) Angle B



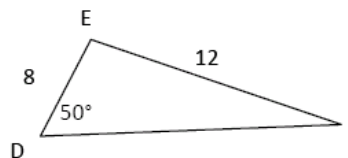
b) Angle P



c) Angle A



d) Angle E

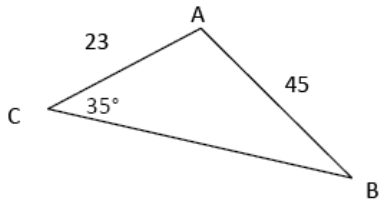


e) For $\triangle ABC$, $a = 18$, $b = 6$, and $\angle A = 28^\circ$. Find $\angle B$ to the nearest whole degree.

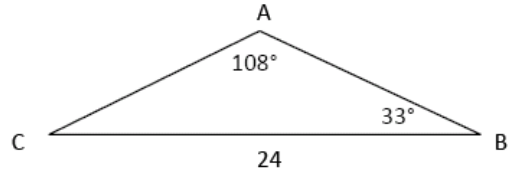
f) For $\triangle DEF$, $d = 54$, $f = 27$, $\angle D = 20^\circ$. Find $\angle F$ to the nearest whole degree.

3. Solve each triangle

a)

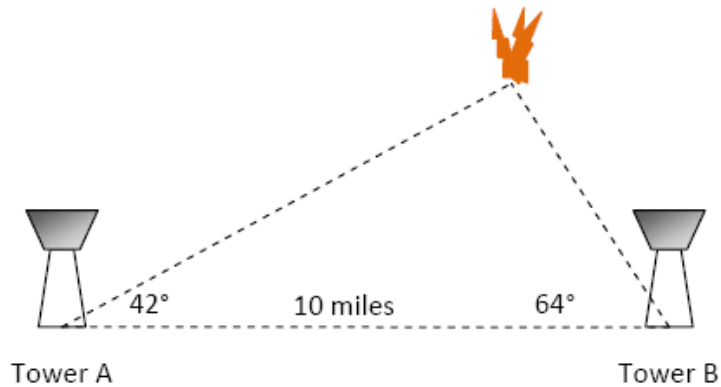


b)



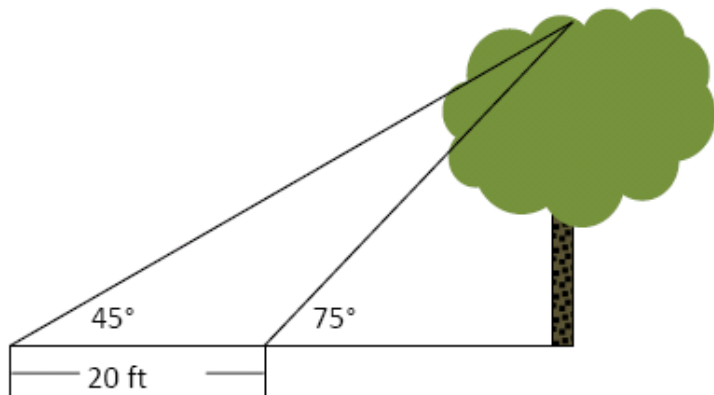
4.

Fire towers A and B are located 10 miles apart. They use the direction of the other tower as 0° . Rangers at fire tower A spots a fire at 42° , and rangers at fire tower B spot the same fire at 64° . How far from tower A is the fire to the nearest tenth of a mile?



5. Challenge Question:

Find the height of the tree below to the nearest foot.



Answers:

1) a) 6.0 b) 8.1 c) 8.0 d) 63.2 e) 30.1 f) 38.75

2) a) 15 b) 31.2 c) 21.8 d) 99.3 e) 9.0 f) 10

3) a) $A=128$ $B=17$ $a=62$ b) $b=13.7$ $c=15.9$ $C=39$

4) 9.4

5) 27 feet