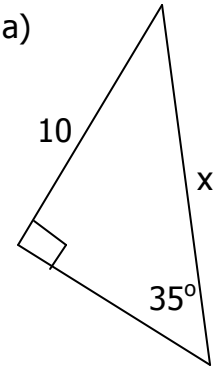
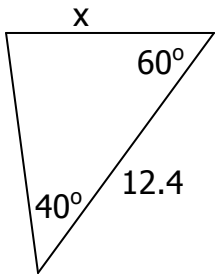
112B Exam Review – Trigonometry

1. Find the missing side in each triangle

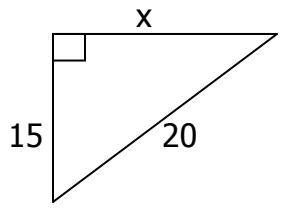
a)



b)

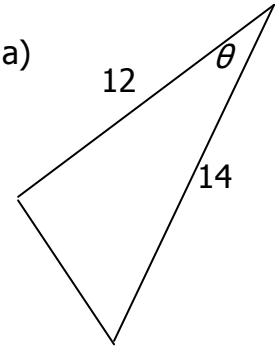


c)

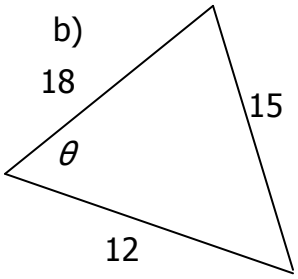


2. Find the missing angle in each triangle

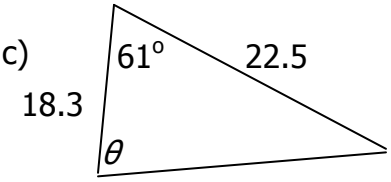
a)



b)



c)



3. a) In $\Delta DEF \rightarrow d = 5,\ e = 8$ and $f = 11$. Calculate $\angle E$

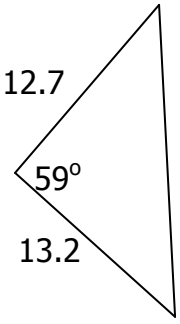
b) In $\Delta ABC \rightarrow a = 5,\ c = 6$ and $\angle A$. Calculate 'b'

c) In $\Delta ABC \rightarrow a = 11.4,\ c = 7.1$ and $\angle C = 36^{\circ}$. Solve ΔABC

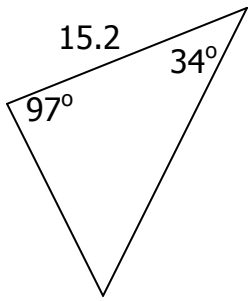
d) In a Δ, two angle measures are 24^{0} and 69^{0}. The longest side is 55.0 m in length. Find the length of the shortest side.

4. Calculate the area of each triangle below.

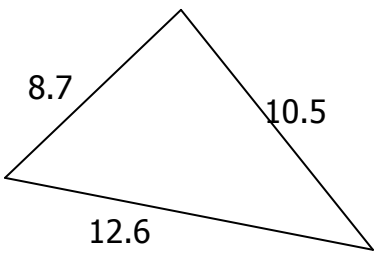
a)



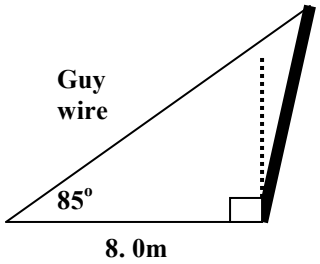
b)



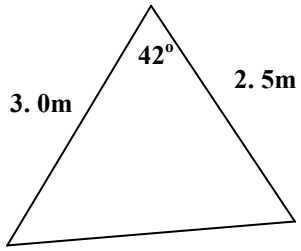
c)



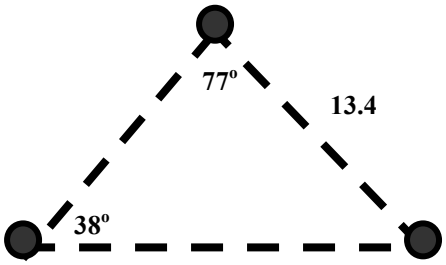
5. A telephone pole casts a shadow 8.0 m long when the angle of elevation of the sun is 65^{o}. The pole is 10^{o} off vertical. Find the length of the pole.



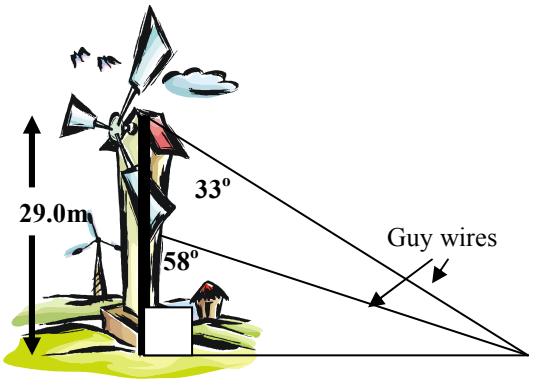
6. The sail on a windsurfer has dimensions as shown. Find the area of the sail.



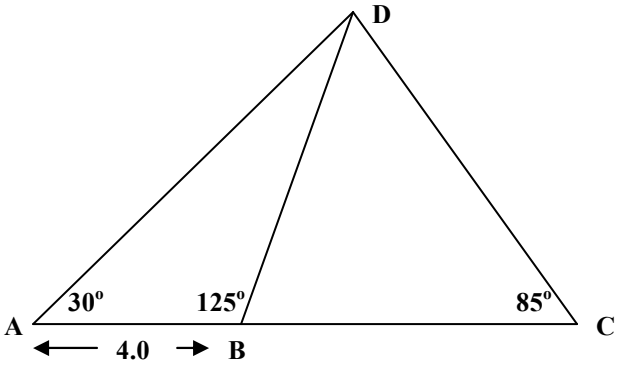
7. Three drill holes are located in a metal plate as shown. Determine the length of the side 'x'.



8. A windmill on a farm is supported by 2 guy wires as shown. Find the lengths of the two guy wires.



9. In the accompanying figure – find the length of CD. (one decimal place)



10. The area of Δ ABC is 130m^2. If a = 22 and b = 17 find the length of 'c'.