**PRACTICE FINAL – TRIGONOMETRY**

\_\_\_\_ 1. Determine the angle of inclination of the line to the nearest tenth of a degree.



\_\_\_\_ 2. Determine K to the nearest tenth of a degree.



\_\_\_\_ 3. Determine ABD to the nearest tenth of a degree.



\_\_\_\_ 4. Determine the exact value of cosT.

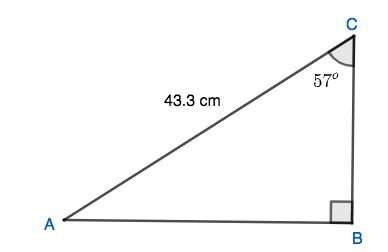


\_\_\_\_ 5. Rhonda goes from C to B following the diagonal. Determine the angle DCB to the nearest degree.



\_\_\_\_ 6. From a point located 25ft. from a totem on the ground, the angle of elevation of the top of the totem is 50.1. What is the height of the totem to the nearest foot?

7. Determine the area of ABC as well as its perimeter to the nearest tenth.



\_\_\_\_ 8. Determine length QR to the nearest metre.



\_\_\_\_ 9. From the top of an observation tower 25 m high, a firefighter sees a fire east of the tower, with a depression angle of 7. He sees another one north of the tower, with a depressions angle of 3. How far are the two fires from one another?

10. A rectangle has length 19.0 cm. The angle formed by its width (shorter) and its diagonal is 56°.   
Determine its width to the nearest tenth of a centimetre.

11. A flag is attached 14.0 m above the ground. John is laying down on the ground and sees the flag with an elevation angle of 63°. At what distance, to the nearest tenth of a metre, is John to the base of the pole where the flag is attached?

12. A cable is connected between the top of a tower and the ground. Determine the height of the tower to the nearest tenth.



**PRACTICE FINAL – EXPONENTS**

1. Evaluate without a calculator :  
     
   a)   
     
     
   b)   
     
     
   c)   
     
     
   d)   
     
     
   e)   
     
     
     
   f)   
     
     
     
   g)   
     
     
     
   h)
2. Write  as a power with a negative exponent.
3. Simplify the following expressions. Give the result with positive exponents only.   
     
   a)   
     
     
   b)   
     
     
   c)   
     
     
     
   d)   
     
     
     
   e)   
     
     
     
   f)   
     
     
     
   g)   
     
     
     
   h)   
     
     
     
   i)   
     
     
     
   j)