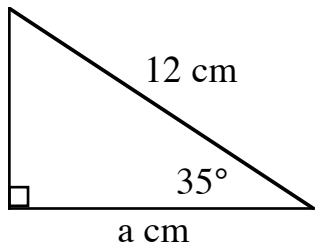
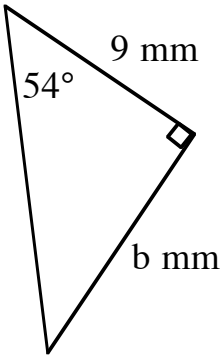
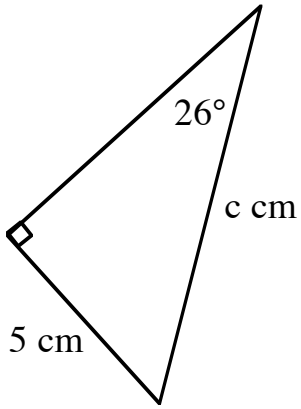
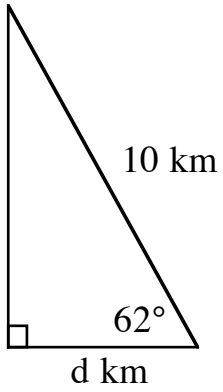
TRIGONOMETRY

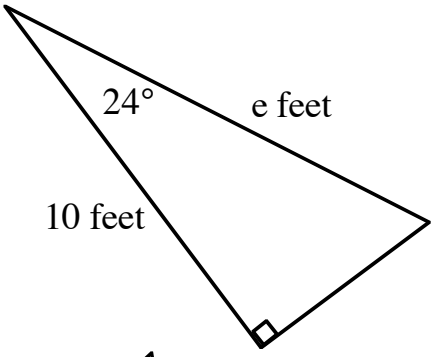
1. Find the values of a, b, c etc.

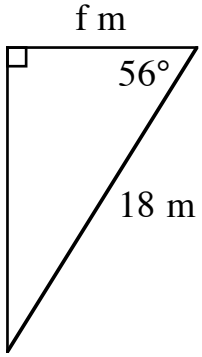


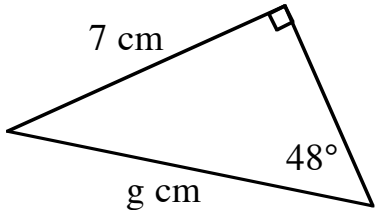


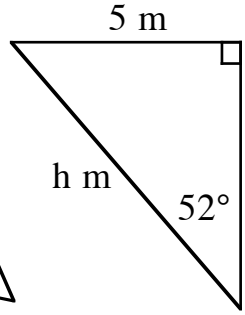


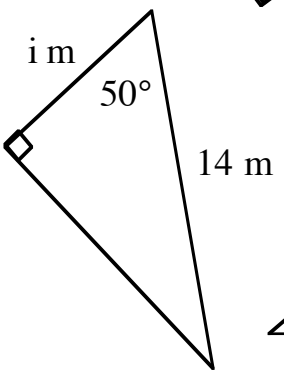


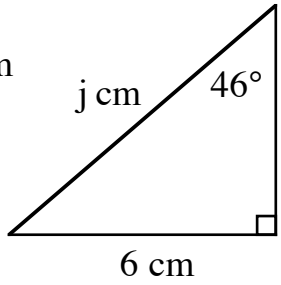


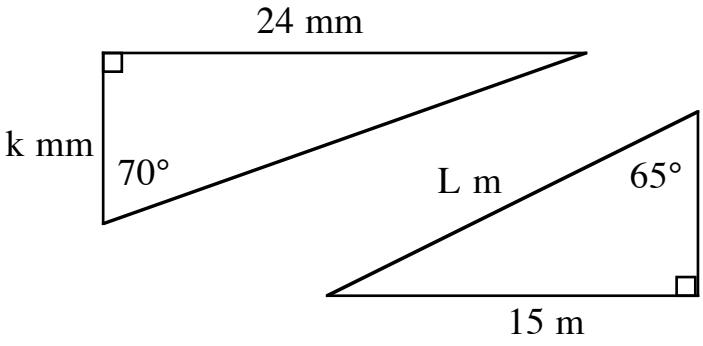


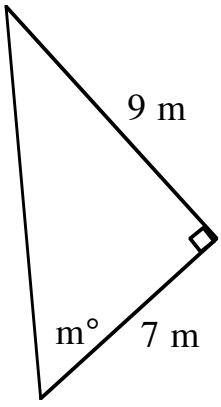


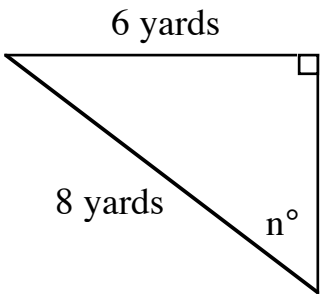


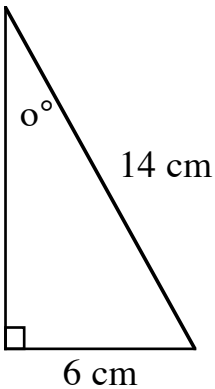


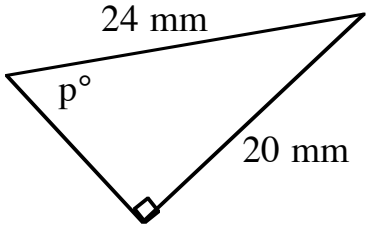


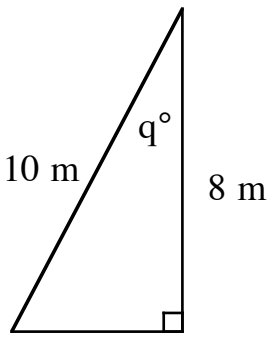


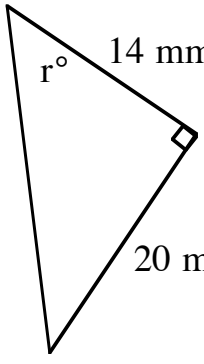


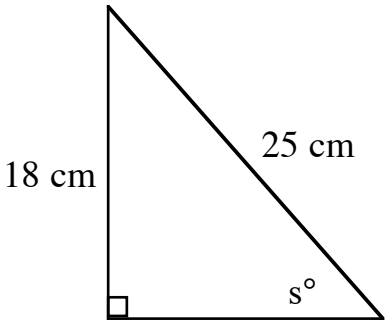


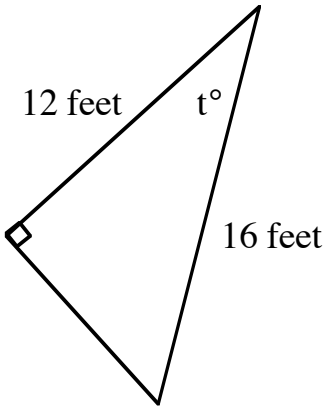






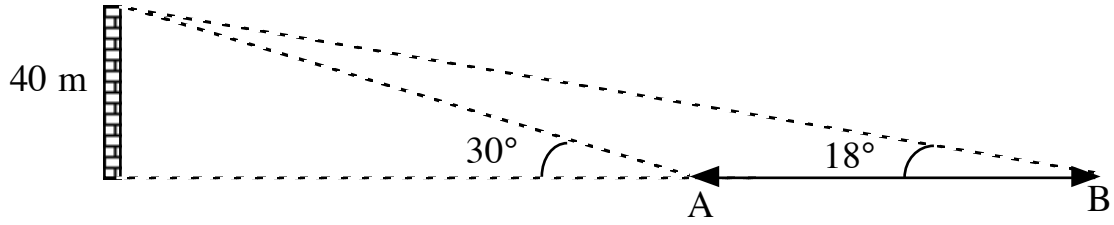






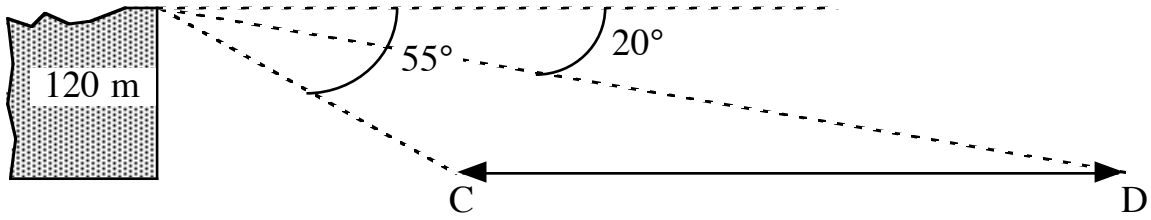
2. Two observers are at positions A and B.
They each measure the angle of elevation of a 40 metre high chimney.
The angles of elevation are 30° and 18° as shown.

Find the distance AB.



3. From the top of a 120 metre high cliff two boats are observed at positions C and D.
The angles of depression are 55° and 20° as shown.

Find the distance CD.



4. Two observers are at positions E and F.
They each measure the angle of elevation of a 60 metre mast.
The angles of elevation are 38° and 44° as shown.

Find the distance EF.