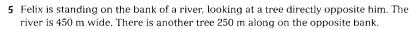
**4** An obtuse-angled triangle ABC has an angle of 30° at A. AB measures 11 cm, and AC measures 15 cm.

Mark this information on the diagram.

## Calculate:

- a the height of the triangle, the line CD
- b the length AD
- c the length BD
- d the length CB
- e the area of the triangle ABC.



- a Draw a diagram showing all this information.
- b Calculate the distance from Felix to the second tree.
- ✓ If Felix turns to look at the second tree, what angle does he turn through?

## Extension )

All these triangles are isosceles triangles. Calculate the length of the hypotenuse of the smallest triangle.

Use this value to calculate the length of the hypotenuse for the other triangles.

If your answers are correct, you will get a sequence of numbers:

Can you find a rule for the sequence?

