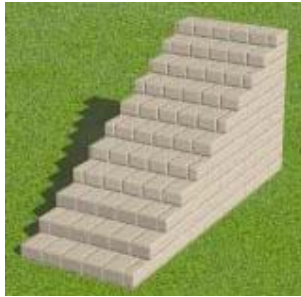


## Trigonometry Problems

The image is of a staircase. If the height of each step is 11.5cm and the width is 13cm, find the angle of incline of the staircase.

**HINT** You will need to find the length and height of the staircase.

If a straight rail is to be put on the stairs going up the whole length of the stairs, what is the minimum length of material needed for the rail?



The following image is the cross-section of a swimming pool.

a. Find the length of the slanted side of the pool,  $l$

b. Find the angle  $\theta$

c. If the width of the pool is 10m, what is the volume of water needed to fill the whole pool? What is the volume in litres?

**HINT** you will need to find the length of the bottom of pool first

