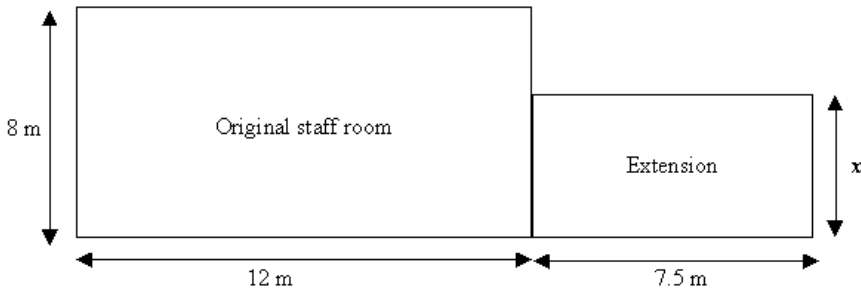# School extensions

Copeland College had a staff room that was getting too small so they decided to build an extension.
They wanted the extension to be smaller but exactly the same shape as the original staff room.

[Not drawn to scale]

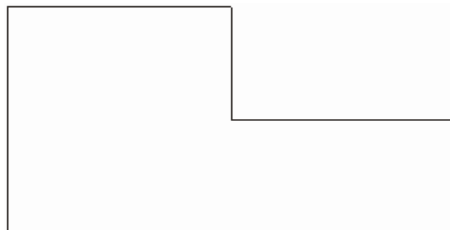a) What is the scale factor for reducing the size of the original staff room to the extension size?

_____

b) What is the width of the extension (x)? _____ m.

The school offices also needed extending. An extension was built that was smaller but exactly the same shape as the original office.
The scale factor used was $\frac{1}{2}$.
Draw the new office extension next to the picture of the original office.

c)

[Drawn to scale]