Perimeter/Area Scale factor Enlargement Formulae

Where k = scale factor value between the old and new values.

Perimeter formula Pnew = k Pold

The new perimeter is k times larger than the old perimeter

Example:…

P(old) =16+10+16+10 = 52 P(new)= 15+24+15+24 =78

78/52 = 1.5 times longer



Area Formula An=K Ao = L W √k √k

The new area is k times larger than the old area, which is also the same as the old length x width x square root of the scale factor squared.

Example:…..

New area is 24 x 8 = 192cm2

Old area is 2 x 6 = 12cm2

so.. 192 = 12K = L x W x √k x √k

the scale factor can be found by dividing 192 by 12 = x16

so.. 192 = 12x16 = L x W x √16 x√16

 192 = 12x16 = Lx4 x Wx4