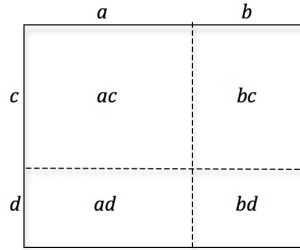
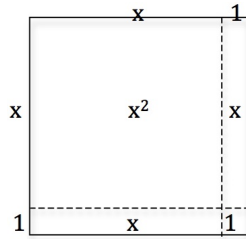
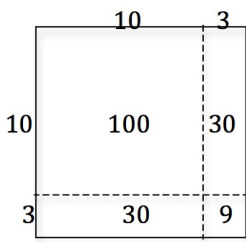


TITLE



Explain how to work out
13 times 13 and
(x+1) times (x+1).

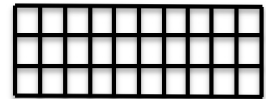
Draw similar diagrams for
15 times 15 and
(x+2) times (x+2).

Work out the expansion of $(a+b)(c+d)$.

Draw your own diagrams and use the same method to find the algebraic expressions for $(x+3)^2$ and $(2x+5)^2$.

HELP

Remember that area is the number of square units **inside the boundary** of the shape. For rectangles this means that, to count the squares (and hence find the area), you need to multiply the length by the breadth. What are the length and breadth of this rectangle? How many units of area (small squares) does it contain?



Do a few more numerical examples. It will help you to understand the connection between areas and multiplication.

Draw diagrams for working out 25^2 for 34^2 and for 25×34 .

Then go on to do the algebraic examples given.

NEXT

Using the same method, calculate 125×34 and other products of 3-digit number by 2-digit numbers.

You could then draw the diagram and work out $(a + b + c)(d + e)$. You are now using the same method for multiplying expressions and removing the brackets.

Then make up a similar activity of your own.