

Brackets and Factorising

1. Simple Single Brackets

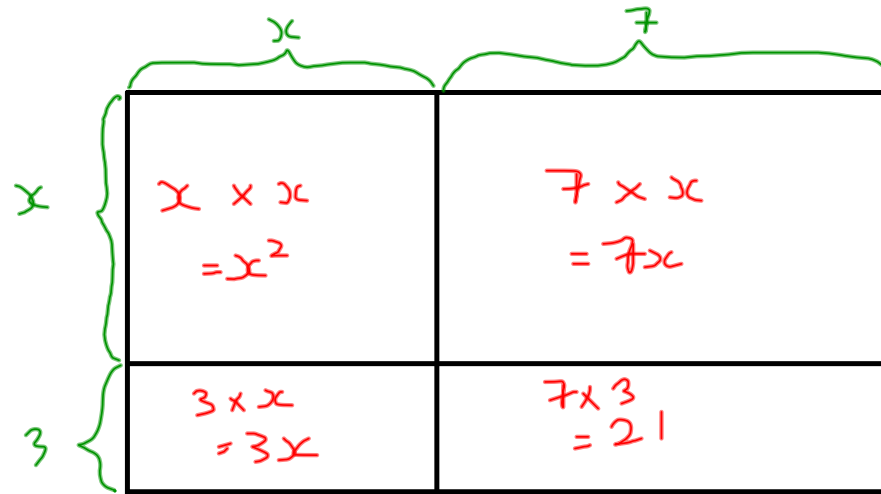
$$3(x+2) = (x+2) + (x+2) + (x+2)$$
$$= \underline{\underline{3x + 6}}$$

$$4(y-5) = \underline{\underline{4y - 20}}$$

$$-2(x-7) = \underline{\underline{-2x + 14}}$$

$$4x(3y-2x) = \underline{\underline{12xy - 8x^2}}$$

Multiplying out double brackets



To find the area of this whole rectangle I need to multiply $(x+7)$ by $(x+3)$

But the whole rectangle is made up of 4 smaller ones...

$$x^2 + 7x + 3x + 21$$

$$= \underline{\underline{x^2 + 10x + 21}}$$