1. Expand, then simplify.

a) $(3x + 5)(x + 1)$

Use algebra tiles to make a rectangle.

Use ___ ⬭ and ___ ☐ for the length.
Use ___ ⬭ and ___ ☐ for the width.
To make the rectangle, use these tiles:

___ ☐ , ___ ⬭ , and ___ ☐
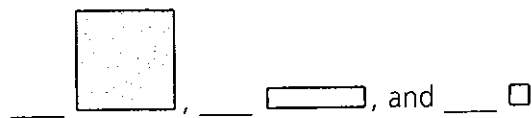
So, $(3x + 5)(x + 1) =$ _____

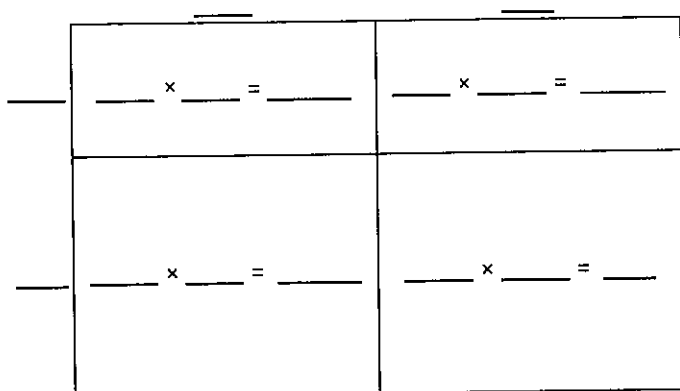Sketch the tiles. Label the length and width.
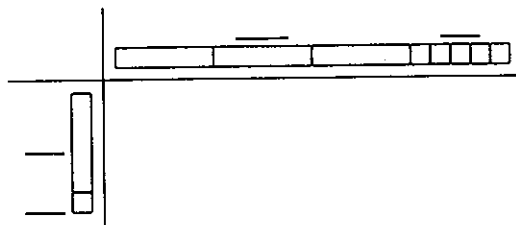
b) $(4w - 3)(5w - 9)$

Use a rectangle diagram.
Sketch a rectangle with length _____ and width _____.
Divide the rectangle into smaller rectangles.

Add the products in the smaller rectangles.

$(4w - 3)(5w - 9) =$ _____ $-$ _____ $-$ _____ $+$ _____

$=$ _____

2. Expand, then simplify.

a) $(-2v + 6)(5v - 3) = (-2v)($_____$) + 6($_____$)$

$= (-2v)($_____$) + (-2v)($_____$) + 6($_____$) + 6($_____$)$

$=$ _____ $+$ _____ $+$ _____ $-$ _____

$=$ _____

b) $(7c - 8)(-4c + 1) =$ _____

$=$ _____