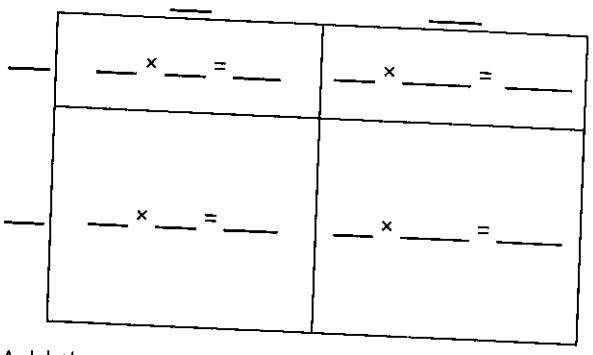
b) $(n - 5)(n + 7)$

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



Add the products from the smaller rectangles.
$(n - 5)(n + 7)$ = _____ − _____ + _____ − _____
= _____

2. Use the distributive property to multiply, then simplify.

a) $(x - 10)(x + 4) = x($_____$) - 10($_____$)$
$= x($_____$) + x($_____$) - 10($_____$) - 10($_____$)$
= _____ + _____ − _____ − _____
= _____

b) $(n + 9)(n - 6) = n($_____$) + 9($_____$)$
$= n($_____$) + n($_____$) + 9($_____$) + 9($_____$)$
= _____ − _____ + _____ − _____
= _____

c) $(h - 7)(h - 4)$ = _____

= _____

3. Factor each trinomial.

a) $x^2 + 10x + 9$

Use algebra tiles.

Sketch the tiles.
Label the length and width.

Use _____ □, _____ ▭, and _____ ■.
Arrange _____ ▭ so
there is space to fit _____ ■.
So, $x^2 + 10x + 9 = (x +$ _____$)(x +$ _____$)$

