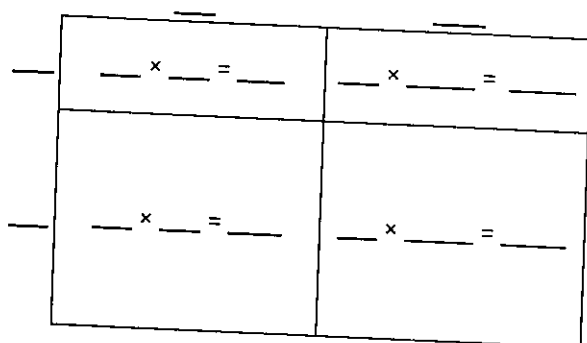


b) $(n - 5)(n + 7)$

Use a rectangle diagram.

Sketch a rectangle with length _____ and width _____.

Divide the rectangle into smaller rectangles.



Add the products from the smaller rectangles.

$$(n - 5)(n + 7) = \underline{\hspace{1cm}} - \underline{\hspace{1cm}} + \underline{\hspace{1cm}} - \underline{\hspace{1cm}}$$

$$= \underline{\hspace{2cm}}$$

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

a) $(x - 10)(x + 4) = x(\underline{\hspace{1cm}}) - 10(\underline{\hspace{1cm}})$
 $= x(\underline{\hspace{1cm}}) + x(\underline{\hspace{1cm}}) - 10(\underline{\hspace{1cm}}) - 10(\underline{\hspace{1cm}})$
 $= \underline{\hspace{1cm}} + \underline{\hspace{1cm}} - \underline{\hspace{1cm}} - \underline{\hspace{1cm}}$
 $= \underline{\hspace{2cm}}$

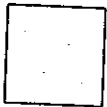


b) $(n + 9)(n - 6) = n(\underline{\hspace{1cm}}) + 9(\underline{\hspace{1cm}})$
 $= n(\underline{\hspace{1cm}}) + n(\underline{\hspace{1cm}}) + 9(\underline{\hspace{1cm}}) + 9(\underline{\hspace{1cm}})$
 $= \underline{\hspace{1cm}} - \underline{\hspace{1cm}} + \underline{\hspace{1cm}} - \underline{\hspace{1cm}}$
 $= \underline{\hspace{2cm}}$

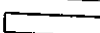

c) $(h - 7)(h - 4) = \underline{\hspace{2cm}}$
 $= \underline{\hspace{2cm}}$

3. Factor each trinomial.

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

Use algebra tiles.

Use , , and .

Arrange  so there is space to fit .

So, $x^2 + 10x + 9 = (x + \underline{\hspace{1cm}})(x + \underline{\hspace{1cm}})$

Sketch the tiles.
Label the length and width.