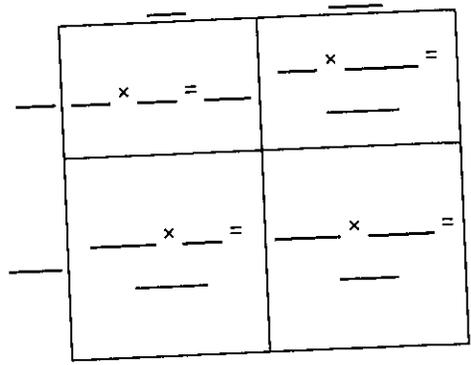


3.5 8. a) Use a rectangle diagram to expand, then simplify $(c - 6)(c - 5)$.
 Sketch a rectangle with length _____ and width _____.
 Divide the rectangle into smaller rectangles.
 Add the products from the smaller rectangles.
 $(c - 6)(c - 5)$
 $=$ _____ - _____ - _____ + _____
 $=$ _____



b) Use the distributive property to expand, then simplify $(h - 4)(h + 7)$.
 $(h - 4)(h + 7) = h(\text{_____}) - 4(\text{_____})$
 $=$ _____

9. a) Use algebra tiles to factor $x^2 + 9x + 8$.

Use _____, _____, and _____.
 Arrange _____ beneath and _____ to the right of _____, so there is space to fit _____.
 So, $x^2 + 9x + 8 =$ _____

Sketch the tiles.
 Label the length and width.

b) Factor $x^2 - 8x + 15$.
 The coefficient of x is _____, so the sum of the factors is _____.
 The constant term is _____, so the product of the factors is _____.

Factors of _____	Sum of the factors
$(-1) \times$ _____	$-1 -$ _____ $=$ _____
$(-3) \times$ _____	$-3 -$ _____ $=$ _____

_____ is positive, so both its factors have the same sign.
 The x -term is _____, so both factors must be _____.

The factors of _____ for the binomials are _____ and _____.
 So, $x^2 - 8x + 15 =$ _____

3.6 10. Expand, then simplify $(2x - 5)(3x + 6)$.

Use the distributive property.
 $(2x - 5)(3x + 6) = 2x(\text{_____} + \text{_____}) - 5(\text{_____} + \text{_____})$
 $= 2x(\text{_____}) + \text{_____}(\text{_____}) - 5(\text{_____}) - \text{_____}(\text{_____})$
 $=$ _____ + _____ - _____ - _____
 $=$ _____