



Name: \_\_\_\_\_



Expand and simplify:

a)  $(x + 3)(x + 4)$

$x^2 + 7x + 12$

e)  $(x + 6)(x + 6)$

$x^2 + 12x + 36$

b)  $(x + 9)(x + 3)$

$x^2 + 12x + 27$

f)  $(x + 5)(x + 9)$

$x^2 + 14x + 45$

c)  $(x + 2)(x + 7)$

$x^2 + 9x + 14$

g)  $(2 + x)(x + 2)$

$x^2 + 4x + 4$

Expand and simplify:

i)  $(x + 3)(x - 5)$

$x^2 - 2x - 15$

m)  $(x + 4)(x - 4)$

$x^2 - 16$

j)  $(x + 4)(x - 2)$

$x^2 + 2x - 8$

n)  $(x + 8)(x - 5)$

$x^2 + 3x - 40$

k)  $(x - 2)(x + 7)$

$x^2 + 5x - 14$

o)  $(a - 5)(a + 1)$

$a^2 - 4a - 5$

Expand and simplify:

i)  $(2x + 2)(x - 4)$

$2x^2 - 6x - 8$

m)  $(x + 5)(3x - 5)$

$3x^2 + 10x - 25$

j)  $(x + 5)(2x - 3)$

$2x^2 + 7x - 15$

n)  $(2x - 5)(3x + 3)$

$6x^2 - 9x - 15$

Exam question:

The rectangle has two dimensions as shown in the diagram (units are in cm).

Write an expression in the form  $x^2 + bx + c$  for its area in  $\text{cm}^2$ .

$x^2 + 8x + 15$

 $x + 3$  $x + 5$ 