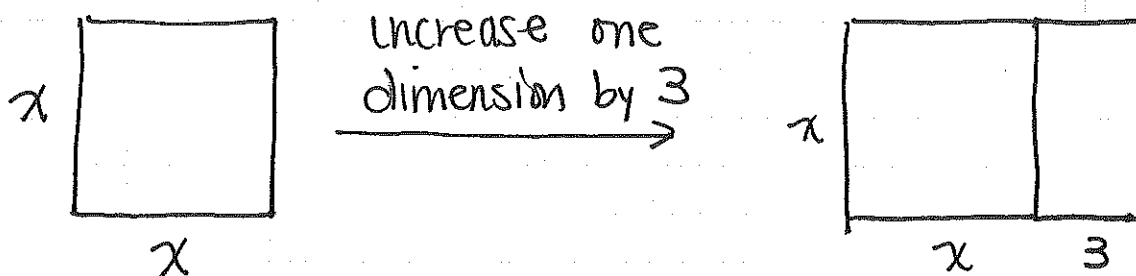


Inv. 2.2



How do these areas compare?

$3x$ bigger

Write 2 expressions for area of the new rectangle.

$$x(x+3) = x^2 + 3x$$

quadratic expression



expressions with an x^2 term

(2 is your highest exponent)

factored form



with () $x(x+3)$

expanded form



without () $x^2 + 3x$

Ⓐ 1. $x(x+6) = x^2 + 6x$

2. $x(x-6) = x^2 - 6x$

3. $(x+2)(x+5) =$

	x	5
x	x^2	$5x$
2	$2x$	10

$x^2 + 5x + 2x + 10$
like terms

$x^2 + 7x + 10$

4. $(x+3)(x+3) =$

	x	3
x	x^2	$3x$
3	$3x$	9

$x^2 + 6x + 9$

5. $(x+2)(x+4) =$

	x	4
x	x^2	$4x$
2	$2x$	8

$x^2 + 6x + 8$

6. $(x+1)(x+x) =$

	x	x
x	x^2	x^2
1	x	x

$2x^2 + 2x$

(D)

1.

	x	5
x	x^2	$5x$
5	$5x$	25

$x^2 + 10x + 25$

2.

	x	3
x	x^2	$3x$
-4	$-4x$	-12

$x^2 - 1x - 12$

3. $2x(5-x) = 10x - 2x^2$

4.

	5	$-x$
$2x$	$10x$	$-2x^2$
1	5	$-x$

$-2x^2 + 9x + 5$

5.

	n	2
n	n^2	$2n$
-2	$-2n$	-4

 = $n^2 - 4$

(E)

1.

	x	7
x	x^2	$7x$
7	$7x$	49

$x^2 + 14x + 49$

3.

	$2n$	-5
$2n$	$4n^2$	$-10n$
-5	$-10n$	25

$4n^2 - 20n + 25$

2.

	x	-7
x	x^2	$-7x$
-7	$-7x$	49

$x^2 - 14x + 49$

4.

	$2n$	5
$2n$	$4n^2$	$10n$
5	$10n$	25

$4n^2 + 20n + 25$