

12/10/12 Review for Final

multiply

Ex

① $(x-3)(x+5)$

	x	-3
x	x^2	$-3x$
5	$5x$	-15

$$x^2 - 3x + 5x - 15$$

$$\boxed{x^2 + 2x - 15}$$

② $(x-3)(x-4)$

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

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

$$\boxed{x^2 - 7x + 12}$$

③ $(2x+1)(x-3)$

	2x	1
x	$2x^2$	x
-3	$-6x$	-3

$$2x^2 + x - 6x - 3$$

$$\boxed{2x^2 - 5x - 3}$$

④ $(x-5)(3x+4)$

	x	-5
3x	$3x^2$	$-15x$
4	$4x$	-20

$$3x^2 - 15x + 4x - 20$$

$$\boxed{3x^2 - 11x - 20}$$

⑤ $(2x+7y)(x+y)$

	2x	7y
x	$2x^2$	$7xy$
y	$2xy$	$7y^2$

$$2x^2 + 7xy + 2xy + 7y^2$$

$$\boxed{2x^2 + 9xy + 7y^2}$$

⑥ $(x-3)(4x-1)$

	x	-3
4x	$4x^2$	$-12x$
-1	$-1x$	$+3$

$$4x^2 - 12x - 1x + 3$$

$$\boxed{4x^2 - 13x + 3}$$

Solve

⑦ $|x| = 36$

⑧ $|x| = 42$

⑨ $|x| = 12$

⑩ $|x-2| = 8$

⑪ $|x+3| = 6$

⑫ $|x-12| = 12$

⑬ $2|3x-8| = 6$

⑭ $3|x-1| = 7$

⑮ $4|x+7| = 8$