

Distributing Factor

### 3.7 Multiplying Polynomials

# Expand & Simplify



Oct 9-10:54 PM

$$3n^4 (5m^3n - 10m^2n^2)$$
$$15m^3n^5 - 30m^2n^6$$

$n^4 \cdot n = n^5$

Mar 23-9:47 AM

$$(x + 4)(x - 3)$$

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

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

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

$$x^2 + x - 12$$

$$(x + 4)(x - 3)$$

	x	+4
x	•	•
-3	•	•

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Mar 23-9:54 AM

(6)(3)

$(2x + 7)(-3x + 5)$

↖ multiply

	$2x$	$+7$
$-3x$	$-6x^2$	$-21x$
$+5$	$+10x$	$+35$

$-6x^2 - 21x + 10x + 35$

$-6x^2 - 11x + 35$

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$(2x + 7)(-3x + 5)$

	$-3x$	$+5$
$2x$	•	•
$-7$	•	•

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# Ultimate Question

$$(2x - 2)(3x^2 - 4x + 1)$$

$$6x^3 - 6x^2 - 8x^2 + 8x + 2x - 2$$

$$6x^3 - 14x^2 + 10x - 2$$

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

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5)  $(10x^5 + 3)(-2x^2 - 11x + 2)$

$$-20x^7 - 110x^6 + 20x^5 - 6x^2 - 33x + 6$$

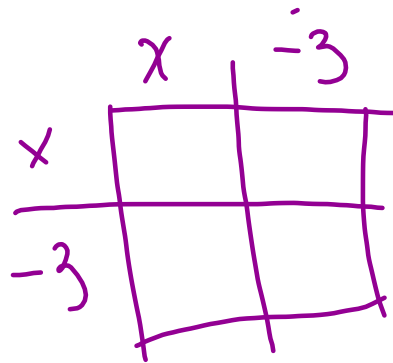
	$-2x^2$	$-11x$	$+2$
$10x^5$	$-20x^7$	$-110x^6$	$+20x^5$
$+3$	$-6x^2$	$-33x$	$+6$

Oct 9-11:18 PM

Expand and simplify

$$(x - 3)^2$$

$$(x - 3)(x - 3)$$



$$x^2 - 3x - 3x + 9$$

$$\boxed{x^2 - 6x + 9}$$

Oct 14-10:26 AM

# 7-14

Expand + Simplify  
March 18

Quiz tomorrow!!  
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Mar 23-10:24 AM