

Lesson 4: Factoring Trinomials of the form $x^2 + bx + c$ **Factor each trinomial.**

1.) $x^2 - 6x - 16$

2.) $x^2 + 14x + 24$

3.) $x^2 - 8x + 7$

4.) $x^2 - 8x - 9$

5.) $x^2 + 4x - 5$

6.) $x^2 + 5x - 36$

7.) $n^2 - 15n + 44$

8.) $y^2 + y - 110$

9.) $x^2 - 16x + 55$

10.) $x^2 - 13x + 12$

11.) $x^2 - 10x + 21$

12.) $k^2 - 9k + 14$

13.) $y^2 - 12y + 11$

14.) $x^2 - 7x + 12$

15.) $x^2 - 22x + 21$

16.) $x^2 + 10xy + 24y^2$

17.) $a^2 - 13ab + 42b^2$

18.) $m^2 + 23mn + 42n^2$

A DRASTIC WAY TO DIET

AN EXTREME BUT EFFECTIVE WAY TO DIET IS HIDDEN IN THE LETTERS BELOW.
TO FIND IT:

Factor each trinomial below. Find the factored form in the set of answers under the exercise and cross out the letter above it. When you finish, the diet will remain. You might call it the "Algebra diet."



① $m^2 + 8m + 7$
 ② $m^2 + 5m + 6$
 ③ $m^2 + 10m + 9$
 ④ $m^2 - 6m + 8$
 ⑤ $m^2 - 8m + 12$
 ⑥ $m^2 + 11m + 24$

⑦ $d^2 - 8d + 15$
 ⑧ $d^2 - 12d + 20$
 ⑨ $d^2 + 14d + 13$
 ⑩ $d^2 - 13d + 36$
 ⑪ $d^2 + 17d + 30$
 ⑫ $d^2 + 9d + 18$

⑬ $x^2 + 5xy + 4y^2$
 ⑭ $x^2 - 18xy + 32y^2$
 ⑮ $x^2 - 13xy + 40y^2$
 ⑯ $x^2 + 7xy + 12y^2$
 ⑰ $x^2 - 27xy + 26y^2$
 ⑱ $x^2 + 19xy + 60y^2$

G	E	B	A	S	U	T	O	Y	F	N	U	L	E	O	M	A	T	O	R	E	G	I	A	N	L	T
(m - 2)(m - 4)	(m + 9)(m + 1)	(m + 8)(m + 1)	(m - 2)(m - 6)	(m + 7)(m + 1)	(m + 3)(m + 4)	(m + 2)(m + 3)	(m + 8)(m + 3)	(m - 2)(m - 8)	(d + 1)(d + 13)	(d + 2)(d + 9)	(d + 2)(d + 15)	(d - 5)(d - 3)	(d - 10)(d - 2)	(d - 2)(d - 18)	(d - 5)(d - 4)	(d - 4)(d - 9)	(d + 6)(d + 3)	(x - 16y)(x - 2y)	(x + 4y)(x + 15y)	(x + 2y)(x + 4y)	(x + y)(x + 4y)	(x + 4y)(x + 3y)	(x + 20y)(x + 3y)	(x - 5y)(x - 8y)	(x - 2y)(x - 13y)	(x - 26y)(x - y)

Did You Hear About...

$(t + 3)(t - 2)$
STARTED
$(t + 6)(t - 1)$
WHO
$(t + 6)(t - 2)$
RED
$(t + 5)(t - 2)$
THE
$(t - 9)(t + 8)$
BECAUSE
$(t - 4)(t + 2)$
JOINED
$(t - 4)(t + 5)$
ARMY
$(t - 10)(t + 2)$
CROSS
$(t + 7)(t - 3)$
CAT
$(t + 4)(t - 3)$
AFTER
$(t - 11)(t + 1)$
THE

A	B	C	D
E	F	G	H
I	J	K	L
M	N	O	P
			?

$(x - 18)(x + 1)$
WANTED
$(x + 9)(x - 4y)$
KIT
$(x - 18y)(x + 2y)$
BAND
$(x - 12y)(x + 3y)$
AID
$(x + 5y)(x - 3y)$
A
$(x + 8)(x - 3)$
TO
$(x + 6)(x - 4)$
HELP
$(x + 6)(x - 3)$
IT
$(x - 25y)(x + 2y)$
LION
$(x - 12)(x + 2)$
BE
$(x - 10y)(x + 5y)$
FIRST

Factor each trinomial below. Find the factored form in the answer column nearest the exercise, and notice the word beneath it. Write this word in the box containing the letter of that exercise. Keep working and you will hear about a kitty cat.

- (A) $t^2 + 3t - 10$
 (B) $t^2 + 4t - 21$
 (C) $t^2 + 5t - 6$
 (D) $t^2 - 2t - 8$
 (E) $t^2 - 10t - 11$
 (F) $t^2 + 4t - 12$
 (G) $t^2 - 8t - 20$
 (H) $t^2 - t - 72$

- (I) $x^2 + 3x - 18$
 (J) $x^2 - 17x - 18$
 (K) $x^2 + 5x - 24$
 (L) $x^2 - 10x - 24$
 (M) $x^2 + 2xy - 15y^2$
 (N) $x^2 - 5xy - 50y^2$
 (O) $x^2 - 9xy - 36y^2$
 (P) $x^2 + 5xy - 36y^2$