Do Now: Factor each completely

1) $y^2 - 6y + 9$

C=9	B=-6
-3·-3	-3+-3=-6

$(y-3)(y-3)$

OR

$(y-3)^2$

2) $x^4 - 16$

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

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

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

$x^2 + bx + c$

C=7	B=8
1·7	1+7=8

$\boxed{(x+7)(x+1)}$

Oct 31-2:26 PM

Homework Answers

1. (x + 4)(x + 2)
2. (x - 5)(x - 8)
3. (x + 6)(x + 7)
4. (x - 8)(x - 2)
5. (x - 5)(x - 5)
6. (x + 1)(x + 4)

$x^2 + 6x + 8$

C=8	B=6
4·2	4+2=6
1·8	

Apr 27-6:57 AM

Factoring Trinomials when c is Negative

$x^2 + bx - c = (x - m)(x + n)$

when b is positive
the larger factor is positive

OR

$x^2 - bx - c = (x + m)(x - n)$

when b is negative
the smaller factor is positive

Oct 31-2:33 PM

Factor the following trinomials.

1. $x^2 + 7x - 8$

$x^2 + bx + c$

C=-8	B=7
4 · -2	4 + -2 = 2
8 · -1	8 + -1 = 7

$\boxed{(x+8)(x-1)}$

OR

$(x-1)(x+8)$

2. $x^2 + x - 20$

$x^2 + bx + c$

C=-20	B=1
20 · -1	
5 · -4	5 + -4 = 1
10 · -2	

$(x+5)(x-4)$

Mar 6-9:57 AM

Factor the following trinomials.

3. $x^2 - 3x - 10$

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

C = -10	B = -3
-5 · 2	-5 + 2 = -3
-10 · 1	-10 + 1

4. $x^2 - 4x - 12$

$(x-6)(x+2)$

-12	-4
-4 · 3	-4 + 3 = -1
-6 · 2	-6 + 2 = -4

Mar 6-9:57 AM

Factor the following trinomials.

5. $c^2 - 5c - 14$

$(c-7)(c+2)$

7. $x^2 + 9x - 36$

$(x+12)(x-3)$

6. $x^2 - x - 2$

$(x+1)(x-2)$

8. $x^2 + 2x - 8$

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

Mar 6-9:57 AM