

What factors of 25 can combine

10

10

14

25

Factoring Trinomials

$$x^2 + bx + c$$

Quadratic
Term

Linear
Term

Constant
Term

"Easy" Trinomials: The Leading Coefficient is 1.

Method

1. Write down two pairs of parentheses.

2. List the factors of the constant term.

3. Find the pair of factors that add up to the coefficient of the linear term.

4. Fill in the factors.

$$\left[\frac{1}{\lambda} \left(\frac{1}{\lambda} + \frac{1}{\lambda} \right) + \frac{1}{\lambda} \right]$$

III

III

III

III

III

III

III

III

III

III

Final radius = 6

(on left) 100 to 1000

$$(x+1)(x+5)$$

1000

$$\frac{5}{5}$$

$$1.5 = 6$$

$$1.5 = 5$$

$$(x+1)(x+5) = 1000$$

$$1.5 = 6$$

Positive number

Positive number

$$(x+1)(x+5) = 1000$$

$$1.5 = 6$$

$$1.5 = 6$$

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

$$(x - 1)(x - 7)$$

$$\frac{7}{+7}$$

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

$$-8$$

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

$$-8$$

$$-74$$

$$(x - 1)(x - 7)$$

$$-1$$

$$-12$$

$$1. \quad x^2 - 2x - 3$$

$$(x-3)(x+1)$$

$$x^2 - 12x - 13$$

When both b and c are negative

$$n^2 - c + n$$

8.8

$$x^2 - 12x - 13$$

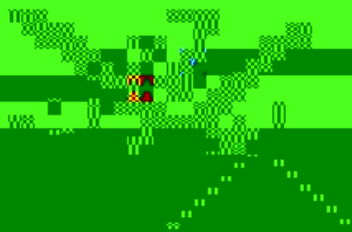
$$(x-13)(x+1)$$

12

ger number is Smaller number

10000 1000 100 10 1

10000 1000 100 10 1



10000 1000 100 10 1

10000 1000 100 10 1

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

$(x+3)(x-1)$

$x^2 + 2x - 3$

11. $x^2 + 12x - 13$

$(x+13)(x-1)$

+ m
number is
positive

n
number is
negative

x^2