

April 20, 2015

$$x^2 + 9x - 2 \rightarrow \begin{matrix} 2:1 \\ 1:2 \end{matrix}$$

$$(x+2)(x-1) \quad \begin{matrix} p: a \cdot c = -2 \\ q: b = 9 \end{matrix}$$

+	-	p	q
2	1	-2	1

$$\frac{-x}{2x} \quad \frac{x}{x}$$

Prime!

Apr 20-9:06 AM

$$x^2 + 4x - 32$$

$$x^2 + 8x - 4x - 32$$

HCF = x

$$x(x+8) - 4(x+8)$$

$$(x+8)(x-4)$$

$a \cdot c = 1 \cdot (-32) = -32$
 $b = 4$

+	-	p	q
8	4	-32	4

Apr 20-9:16 AM

$$18y^2 - 3y - 10$$

$$18y^2 - 15y + 12y - 10$$

HCF = 3y HCF = 2

$$3y(6y-5) + 2(6y-5)$$

$$(6y-5)(3y+2)$$

$a \cdot c = 18(-10) = -180$
 $b = -3$

=	+	p	q
18	10	-8	-8
10	7	-70	✓
11	8	-80	✓
15	12	-180	✓

Apr 20-9:21 AM

$$18y^2$$

$$-10$$

Apr 20-9:30 AM

Difference of Two Squares

$$121x^2d^2 - 49$$

a^2 b^2

$$a' = 11xd \rightarrow (11xd)^2 = (11xd)(11xd)$$

$$b' = 7 \rightarrow 7^2 = 7 \cdot 7 = 49 = 11 \cdot 11 \cdot x \cdot x \cdot d \cdot d = 121x^2d^2$$

$$a^2 - b^2 = (a+b)(a-b)$$

$$(11xd+7)(11xd-7)$$

Apr 20-9:36 AM

$$4x^2 - 5$$

not Factorable
"Prime"

$$a' = 2x$$

$$b = (?)^2 = 5$$

$$= \sqrt{5}$$

Apr 20-9:40 AM

make a List of Squares

x	x^2
1	1
2	4
3	9
4	16
5	
⋮	
20	

Apr 20-9:42 AM