

9-3-19 1<sup>st</sup> Try

$$(x+2)(x+10)$$

$$x^2 \quad \boxed{+2x + 10x} \quad 20$$

$$x^2 + 12x + 20$$

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

$$x^2 + 9x + 20$$

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

$$x^2 + 7x + 10$$

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

$$x^2 + 6x + 8$$

$$(x+5)(x+10)$$

$$x^2 + 15x + 50$$

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

$$x^2 + 7x + 12$$

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

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

$$(x-4)(x+6)$$

$$x^2 + 2x - 24$$

$$x^2 + \square x + 20$$

	<u>20</u>
	1, 20
$(x+10)(x+2)$	12x
$(x+5)(x+4)$	9x
$(x+1)(x+20)$	21x

$$x^2 + \square x + 12$$

	<u>12</u>
13x	1, 12
8x	2, 6
7x	3, 4

$(x+3)(x+4)$   
 $(x+6)(x+2)$   
 $(x+1)(x+12)$

$$x^2 + \square x + 30$$

	<u>30</u>
31x	1, 30
17x	2, 15
13x	3, 10
11x	5, 6

$$x^2 + \square x + 24$$

	<u>24</u>
25x	1, 24
14x	2, 12
11x	3, 8
10x	4, 6

① Factor  $x^2 + 15x + 14$

	<u>14</u>
	1, 14
	2, 7

$(x+1)(x+14)$

② Factor  $x^2 + 13x + 40$

	<u>40</u>
9x	1, 40
22x	2, 20
14x	4, 10
13x	5, 8

$(x+5)(x+8)$

$$\textcircled{3} \quad x^2 - 8x - 20$$

$$(x+2)(x-10)$$

D: ff.

$$\begin{array}{r} 19 \\ -8 \\ 1 \end{array} \quad \begin{array}{r} \underline{20} \\ 1, 20 \\ +2, 10 \\ 4, 5 \end{array}$$

9-3-19 3<sup>rd</sup> Try

$$(x+3)(x+5)$$

$$x^2 + 8x + 15$$

$$(x+4)(x+10)$$

$$x^2 + 14x + 40$$

$$(x+3)(x+7)$$

$$x^2 + 10x + 21$$

$$(x+2)(x+11)$$

$$x^2 + 13x + 22$$

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

$$x^2 + 2x - 35$$

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

$$x^2 - 7x + 12$$

$$x^2 + \square x + 20$$

$$(x+5)(x+4) \quad 9x$$

$$(x+2)(x+10) \quad 12x$$

$$(x+1)(x+20) \quad 21x$$

$$x^2 + \square x + 12$$

12

$$(x+3)(x+4) \quad 7x$$

$$(x+1)(x+12) \quad 13x$$

$$(x+2)(x+6) \quad 8x$$

$$x^2 + \square x + 30$$

30

$$1, 30 \quad 31$$

$$2, 15 \quad 17$$

$$3, 10 \quad 13$$

$$5, 6 \quad 11$$

$$x^2 + \square x + 40$$

40

$$1, 40 \quad 41x$$

$$2, 20 \quad 22x$$

$$4, 10 \quad 14x$$

$$5, 8 \quad 13x$$

$$x^2 + \square x + 100$$

100

$$1, 100 \quad 101x$$

$$2, 50 \quad 52x$$

$$4, 25 \quad 27x$$

$$5, 20 \quad 25x$$

$$10, 10 \quad 20x$$

① Factor  $x^2 + 13x + 12$

$(x+1)(x+12)$

- $\frac{12}{1,12}$
- $2,6$
- $3,4$

② Factor  $x^2 + 12x + 20$

$(x+2)(x+10)$

- $\frac{20}{1,20}$
- $2,10$
- $4,5$

③ Factor  $x^2 + 4x - 12$  <sup>DIFF</sup>  $\frac{-12}{-12}$

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

- $1, 12$
- $4, -2, 6$
- $1, 3, 4$

9-3-19 4<sup>th</sup> Trig

$$\begin{array}{l} \overbrace{(x+3)(x+5)} \\ x^2 + 8x + 15 \end{array}$$

$$\begin{array}{l} \overbrace{(x+2)(x+10)} \\ x^2 + 12x + 20 \end{array}$$

$$\begin{array}{l} \overbrace{(x+4)(x+6)} \\ x^2 + 10x + 24 \end{array}$$

$$\begin{array}{l} \overbrace{(x+5)(x+10)} \\ x^2 + 15x + 50 \end{array}$$

$$\begin{array}{l} (x+10)(x+3) \\ x^2 + 13x + 30 \end{array}$$

$$\begin{array}{l} (x+8)(x+8) \\ x^2 + 16x + 64 \end{array}$$

$$\begin{array}{l} (x+3)(x+20) \\ x^2 + 23x + 60 \end{array}$$

$$\begin{array}{l} \overbrace{(x+8)(x-2)} \\ x^2 + 6x - 16 \end{array}$$

$$\begin{array}{l} \overbrace{(x+10)(x-3)} \\ x^2 + 7x - 30 \end{array}$$

$$\begin{array}{l} \overbrace{(x-5)(x-3)} \\ x^2 - 8x + 15 \end{array}$$

$$x^2 + \square x + 20$$

$$(x+2)(x+10)$$

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

$$(x+1)(x+20)$$

$$x^2 + \square x + 12$$

$$(x+1)(x+12)$$

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

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

$$x^2 + \square x + 100$$

$$\begin{array}{r} \underline{100} \\ 14x \quad 1,100 \\ 52x \quad 2,50 \\ 29x \quad 4,25 \\ 25x \quad 5,20 \\ 26x \quad 10,10 \end{array}$$

$$x^2 + \square x + 60$$

$$\begin{array}{r} \underline{60} \\ 61x \quad 1,60 \\ 32x \quad 2,30 \\ 23x \quad 3,20 \\ 17x \quad 4,15 \\ 17x \quad 5,12 \\ 16x \quad 6,10 \end{array}$$



① Factor  $x^2 + 7x + 12$

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

$\frac{12}{1,12}$   
 $2,6$   
 $3,4$

② Factor  $x^2 + 21x + 20$

$(x+1)(x+20)$

$\frac{20}{1,20}$   
 $2,10$   
 $4,5$

③ Factor  $x^2 + 4x - 12$

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

Diff.  $\frac{12}{1,12}$   
 $+4$   $-2,6$   
 $1$   $3,4$

④ Factor  $x^2 + 18x - 40$

$(x-2)(x+20)$

Diff  $\frac{40}{1,40}$   
 $+18$   $-2,20$   
 $6$   $4,10$   
 $3$   $5,8$