

9-17-13

3<sup>rd</sup> Trig

Logic 6

		x	
	4, 10 12, 16	1	x
x	7	6	x

5<sup>th</sup> Logic

2, 3, 7, 9

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.  
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continue 2-1 discussion

① Factor  $x^2 - 8x - 20$   $\frac{20}{1, 20}$   
 $(x+2)(x-10)$   $\frac{+2, -10}{4, 5}$

② Factor  $x^2 + 21x + 80$   $\frac{80}{1, 80}$   
 $(x+5)(x+16)$   $\frac{2, 40}{4, 20}$   
 $\frac{5, 16}{8, 10}$

③ Factor  $2x^2 + 13x + 15$   $\frac{15}{1, 15}$   
 $\frac{3, 5}$

$$x(2x + 1)(x + 15)$$

$$x(2x + 15)(x + 1)$$

$$\checkmark (2x + 3)(x + 5)$$

$$x(2x + 5)(x + 3)$$

④ Factor  $3x^2 + 17x + 10$   $\frac{10}{1, 10}$   
 $\frac{2, 5}$

$$x(3x + 1)(x + 10)$$

$$x(3x + 10)(x + 1)$$

$$\checkmark (3x + 2)(x + 5)$$

$$x(3x + 5)(x + 2)$$

⑤ Factor  $6x^2 + 17x + 5$   $\frac{5}{1, 5}$

$$x(6x + 1)(x + 5)$$

$$x(6x + 5)(x + 1)$$

$$\checkmark (3x + 1)(2x + 5)$$

$$x(3x + 5)(2x + 1)$$

⑥ Factor  $2x^2 + 14x + 20$

$$2(x^2 + 7x + 10)$$

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

⑦ Factor  $5x^2 - 34x - 7$   $\frac{1,7}{1,7}$

$$(5x + 1)(x - 7)$$
$$(5x - 7)(x + 1)$$

⑧ Factor  $2x^2 - 5x - 3$   $\frac{3}{1,3}$

$$\checkmark (2x + 1)(x - 3)$$
$$(2x - 1)(x + 3)$$
$$(2x + 3)(x - 1)$$
$$(2x - 3)(x + 1)$$

9-17-13  
4<sup>th</sup> Trig

Logic 6

	4,10 12,16	1	.
.	7	6	.

Continue discussing factoring

① Factor  $x^2 + 11x + 30$   
 $(x+5)(x+6)$

$\frac{30}{1, 30}$   
 $2, 15$   
 $3, 10$   
 $5, 6$

② Factor  $x^2 - x - 12$   
 $(x+3)(x-4)$

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

③ Factor  $2x^2 + 7x + 3$   
 $\checkmark (2x+1)(x+3)$   
 $\times (2x+3)(x+1)$

$\frac{3}{1, 3}$

④ Factor  $5x^2 + 17x + 6$   
 $\times (5x+1)(x+6)$   
 $\times (5x+6)(x+1)$   
 $\checkmark (5x+2)(x+3)$   
 $\times (5x+3)(x+2)$

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

⑤ Factor  $3x^2 + 13x + 10$   $\frac{10}{1,10}$   
 $\frac{2,5}{2,5}$

~~$(3x + 1)(x + 10)$~~   
 $(3x + 10)(x + 1)$   
 ~~$(3x + 2)(x + 5)$~~   
 ~~$(3x + 5)(x + 2)$~~

⑥ Factor  $2x^2 + 10x + 8$

$2(x^2 + 5x + 4)$   
 $2(x + 1)(x + 4)$

⑦  $5x^2 - 34x - 7$   $1,7$

~~$(5x + 1)(x - 7)$~~   
 ~~$(5x - 7)(x + 1)$~~

⑧ Factor  $2x^2 + 9x - 11$   $\frac{11}{1,11}$

~~$(2x + 1)(x + 11)$~~   
 $(2x + 11)(x - 1)$

⑨ Factor  $5x^2 + 7x - 6$   $\frac{6}{1,6}$   
 $\frac{2,3}{2,3}$

~~$(5x + 1)(x + 6)$~~   
 ~~$(5x + 6)(x + 1)$~~   
 ~~$(5x + 2)(x + 3)$~~   
 $(5x - 3)(x + 2)$