9-18-19 1st Try

(19) $(9x^3 - 3x^2) + (3x - 1)$

$3x^2(3x-1) + 1(3x-1)$

$(3x-1)(3x^2+1)$

(28) $2a - 7 \overline{)4a^2 - 2a - 35}$

$2a + 6 + \frac{7}{2a-7}$

$-(4a^2 - 14a)$

$12a - 35$

$-(12a - 42)$

7

(33) $15n^2 + \square n + 25$

15 → 1, 15 → 3, 5

25 → 1, 25 → 5, 5

6 possibilities (2 + 1)

$(x+5)(15x+5)$

~~$(x+5)(15x+5)$~~

(24) $\frac{4x-5}{x-6}$

$x - 6 \neq 0$

$+6 \quad +6$

$x \neq 6$ $\quad x \neq 6$

(25) $\frac{x-4}{x^2-13x+30}$

$x^2 - 13x + 30 \neq 0$

$(x-10)(x-3) \neq 0$

$x - 10 \neq 0$ $\quad x - 3 \neq 0$

$+10 \quad +10$ $\quad +3 \quad +3$

$x \neq 10$ $\quad x \neq 3$

(6) $4x^2 + 12xy + 9y^2$

$4x^2 + 12x + 9$

4: 1,4 ; 2,2 — 9: 1,9 ; 3,3

13 $(x+1)(4x+9)$

37 $(x+9)(4x+1)$

15 $(x+3)(4x+3)$

20 $(2x+1)(2x+9)$

12 $(2x+3y)(2x+3y)$

(31) $a-2\overline{)a^2+3}$

$a+2+\frac{7}{a-2}$

$a-2\overline{)a^2+0a+3}$

$-(a^2-2a)$

$2a+3$

$-(2a-4)$

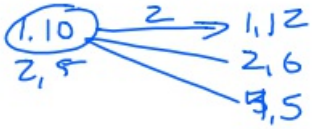
7

Cup $1x \to 10x$ Green

$1 \to 20$ Yellow (no 13, 17, 19)

$10x^2 + \square x + 15$

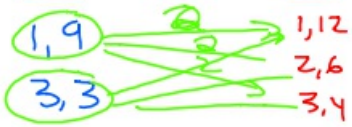
$10x^2 + \square x + 20$



~~$6x^2 + \square x + 10$~~

$5x^2 + \square x + 8$

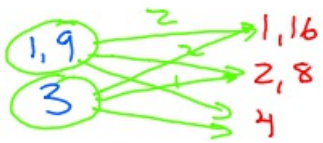
$9x^2 + \square x + 12$



9

$8x^2 + \square x + 20$

$9x^2 + \square x + 16$



8

9-18-19 3rd Trig

Ex: $x^2 - 16$ $x^2+0x-16$

16
1, 16
2, 8
-4, 4

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

Ch 2 PT 1

(28) $2a-7 \overline{)4a^2-2a-35}$

$2a+6+\frac{7}{2a-7}$

$-(4a^2-14a)$

$12a-35$

$-(12a-42)$

7

(22) $\frac{n^2+10n+21}{n^2+4n+3}$

21
1, 21
3, 7

$\frac{(n+3)(n+7)}{(n+1)(n+3)}$

3
1, 3

$n+3 \neq 0$
$-3 \quad -3$
$n \neq -3$

$\frac{n+7}{n+1}$ $\{n \neq -3\}$

(24) $\frac{4x-5}{x-6}$ Who can x be?

$x-6 \neq 0$

$x \neq 6$

(12) $27n^3 + 125y^3$

S O F A S

$(3n+5y)(9n^2-15ny+25y^2)$

New one

Factor $1000n^3 - 343y^3$

S O P A S

$(10n - 7y)(100n^2 + 70ny + 49y^2)$

(15) $100n^3b^{10} + 125n^3b^9$

$25n^3b^9(4b + 5)$

New

Factor $8n^3y^4b^5 + 10ny^3b^3$

$2ny^3b^3(4n^2yb^2 + 5)$

$8n^2 + \square n + 9$

8: 1,8 ; 2,4 — 9: 1,9 ; 3,3

New with squares I gave you.

$10x^2 + \square x + 8$

$x \cdot 10x$: 1 8

$2x \cdot 5x$: 2 4

$9x^2 + \square x + 12$

$x \cdot 9x$: 1 12 ; 2 6 ; 3 4

$3x$

(9)

$5x^2 + \square x + 10$

$x \cdot 5x$: 1 10 ; 2 5

(4)

$10x^2 + \square x + 20$

$9x^2 + \square x + 4$

$x \cdot 9x$: 1 4

$3x$: 2

$4x^2 + \square x + 14$

$x \cdot 4x$: 1 14

$2x$: 2 7

1

(6)