Algebra I

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2) $10t^2-17t+3$

4) $3r^3+4r^2-19r+10$

6) $t^2-14t+49$

8) $36^2-12b+1$ 9) s^2-6s+9

10) $n^2+12n+35$

12) $r^2+3r-18$

14) $3a^2-11a+6$

16) $10k^2-11k-6$

18) $9x^2-49$

20) $x^3+5x^2+10x+12$

22) $y^3-8y^2+8y+35$

24) $6s^3-2s^2-s+2$

26) $4n^3-16n^2+11n+10$

28) $x^3-21x+20$ 29) $169-52x+4x^2$

32) $-6y^3+11y^2+14y-24$

34) $-2a^3-5a^2+11a-4$

36) $-4x^3+8x^2y-5xy^2+y^3$

38) $\{-13\}$

40) $\{5\}$

42) $\{\frac{1}{2}\}$

2) $(5t-1)(2t-3)$

$10t^2-15t-2t+3$

$10t^2-17t+3$

4) $(r^2+2r-5)(3r-2)$

$3r^3-2r^2+6r^2-4r-15r+10$

$3r^3+4r^2-19r+10$

24) $(3s+2)(2s^2-2s+1)$

$6s^3-6s^2+3s+4s^2-4s+2$

$6s^3-2s^2-s+2$

4) $(r^2+2r-5)(3r-2)$

$3r^3+6r^2-15r-2r^2-4r+10$

$3r^3+4r^2-19r+10$

20) $(x+3)(x^2+2x+4)$

$x^3+2x^2+4x+3x^2+6x+12$

$x^3+5x^2+10x+12$

10) $(n+2)(n+5)$

$n^2+5n+2n+35$

$n^2+12n+35$

14) $(3a-2)(a-3)$

$3a^2-9a-2a+6$

$3a^2-11a+6$

30) $(5+x)(x^2-5x+4)$

$5x^2-25x+20+x^3-5x^2+4x$

$x^3-21x+20$

34) $(1-2a)(a^2-4+3a)$

$a^2-4+3a-2a^3+8a-6a^2$

$-2a^3-5a^2+11a-4$

38) $(x-3)(x+7)-(x+1)(x+5)=0$

$(x^2+7x-3x-21)-(x^2+5x+x+5)=0$

$(x^2+4x-21)-(x^2+6x+5)=0$

$x^2+4x-21-x^2-6x-5=0$

$-2x-26=0$

$-2x-26+26=0+26$

$\frac{-2x}{-2}=\frac{26}{-2}$

$x=-13$

$\{-13\}$

40) $(3x+5)(2x-3)=(x-1)(6x+5)$

$6x^2-9x+10x-15=6x^2+5x-6x-5$

$6x^2+x-15=6x^2-x-5$

$6x^2-6x^2+x-15=6x^2-6x^2-x-5$

$x-15=-x-5$

$x+x-15=-x+x-5$

$2x-15=-5$

$2x-15+15=-5+15$

$\frac{2x}{2}=\frac{10}{2}$

$x=5$

$\{5\}$

42) $(2n-3)(n^2+3n-2) = (n-1)(2n^2+5n-4)$

$2n^3+6n^2-4n-3n^2-9n+6 = 2n^3+5n^2-4n-2n^2-5n+4$

$2n^3+3n^2-13n+6 = 2n^3+3n^2-9n+4$

$2n^3-2n^3+3n^2-3n^2-13n+6 = 2n^3-2n^3+3n^2-3n^2-9n+4$

$-13n+6 = -9n+4$

$-13n+13n+6 = -9n+13n+4$

$6 = 4n+4$

$6-4 = 4n+4-4$

$\frac{2}{4} = \frac{4n}{4}$

$\frac{1}{2} = n$

$\left\{\frac{1}{2}\right\}$