Algebra II

pg 186

17) $(t-3)(t^2+3t+9)$

18) $(2p+1)(4p^2-2p+1)$

19) $2rs(2r+s)(4r^2-2rs+s^2)$

20) $3x^2y(y-3)(y^2+3y+9)$

36) $2x^3(5-x)(25+5x+x^2)$

40) $(2-z)(4+2z+z^2)\cdot(2+z)(4-2z+z^2)$

42) $(a-b)(a+b+1)$

44) $2x(x^2+3y^2)$

46) $(u-v)(u^2+v^2)$

48) $8ab(a^2+b^2)$

50) $(x^n-1)^2$

pg 191

36) $2(2r^2+8rs-5s^2)$

38) prime

40) $3u(3v+u)(9v^2-3uv+u^2)$

42) $(x-2y)(x^2+2xy+4y^2)\cdot(x+2y)(x^2-2xy+4y^2)$

44) $(z-3)(z+3)(z-1)(z+1)$

Nov 8-8:59 AM

20) $3x^2y^4-81x^2y$

$3x^2y(y^3-27)$

$3x^2y(y^3-3^3)$

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

$3x^2y(y-3)(y^2+3y+9)$

$a^3-b^3=(a-b)(a^2+ab+b^2)$

Nov 5-9:26 AM

40) $64 - z^6$

$8^2 - (z^3)^2$

$(8 + z^3)(8 - z^3)$

$(2^3 + z^3)(2^3 - z^3)$

$(2+z)(4 - 2z + z^2)(2 - z)(4 + 2z + z^2)$

$a^3 + b^3 = (a+b)(a^2 - ab + b^2)$

$a^3 - b^3 = (a-b)(a^2 + ab + b^2)$

Nov 5-9:30 AM

44) $(x+y)^3 + (x-y)^3$

$a^3 + b^3 = (a+b)(a^2 - ab + b^2)$

$((x+y) + (x-y))((x+y)^2 - (x+y)(x-y) + (x-y)^2)$

$2x((x+y)(x+y) - (x+y)(x-y) + (x-y)(x-y))$

$2x(x^2 + 2xy + y^2 - [x^2 - y^2] + x^2 - 2xy + y^2)$

$2x(2x^2 + 2y^2 - x^2 + y^2)$

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

Nov 5-9:35 AM

46) $u^3 - v^3 - u^2v + uv^2$

$(u^3 - u^2v) + (-v^3 + uv^2)$

$u^2(u - v) + v^2(u - v)$

50) $x^{2n} - 2x^n + 1$

$(x^n - 1)(x^n - 1)$

Nov 5-9:42 AM