secondary 2 mathematics@2024-12-07

expand

1. Expand $-20(7-w)w^2(6w+4)$.
2. Expand $-10(5-7y)(6y-3)y^2$.
3. Expand $2(-6y-2)(2-3y)(6-y)y$.

factor

1. Factor x^2-y^2.
2. Factor x^2+y^2.
3. Factor x^3+y^3.
4. Factor x^3-y^3.
5. Factor $x^2-2xy+y^2$.
6. Factor $x^2+2xy+y^2$.
7. Factor $u^2+5u-14$.
8. Factor $-476v^2-2380v+6664$.
9. Factor $-952v^{10000}-4760v^{9999}+13328v^{9998}$.
10. Factor $2w^4+10w^2-28$.
11. Factor $4z^6+20z^3-56$.
12. Factor $8a^{10000}+40a^{5000}-112$.
13. Factor $16b^{16000}+80b^{11000}-224$.
14. Factor $y^2+8yz+12z^2$.
15. Factor $y^2+8yz^3+12z^6$.
16. Factor $y^4+8y^3z^4+12y^2z^7$.
17. Factor $32j^{16000}k^{2000}+160j^{11000}k^{3000}-448k^{4000}$.

identities

1. Find P,Q in $Px^2-7x+Q\equiv(x-5)(x-2)$.
2. Find R,S,T in $2(4x+1)(Rx-S)\equiv 48x^2+Tx-8$.
3. Find A,B in $Ax+B$. When $x=3$, $Ax+B=16$. When $x=5$, $Ax+B=30$.
4. Find A,B,C in Ax^2+Bx+C. When $x=5$ or $x=-4$, $Ax^2+Bx+C=0$. When $x=0$, $Ax^2+Bx+C=100$.
5. Find X,Y,Z in Xa^2+Ya+Z. When $a=-3$ or $a=5$, $Xa^2+Ya+Z=0$. When $x=0$, $Xa^2+Ya+Z=-30$.