а) $(a+1)^2-2(a+1)+1$;
б) $(m-n)^2+2n(m-n)+n^2$;
в) $(p-q)^2-2(p^2-q^2)+(p+q)^2$;
г) $(x+2y)^2+2(x^2-4y^2)+(2y-x)^2$.

ДЗ

(x-2y)(x+2y)=((-1)(-1)x+(-1)2y)(x+2y)=
=(-1)((-1)x+2y)(x+2y)=-(-x+2y)(x+2y)

1)(a+1)^2-2(a+1)+1=(a+1)^2-2(a+1)*1+1^2=((a+1)-1)^2=(a+1-1)^2=a^2

x^2 - 2x + 1=x^2 - 2x*1 + 1^2=(x-1)^2
a^2 - 2ab + b^2 =(a-b)^2
2)(m-n)^2+2n(m-n)+n^2=((m-n)+n)^2=(m-n+n)^2=m^2
3)(p-q)^2-2(p^2-q^2)+(p+q)^2=(p-q)^2-2(p-q)(p+q)+(p+q)^2=((p-q)-(p+q))^2=(p-q-p-q)^2=
=(-q-q)^2=(-2q)^2=4q^2

(p^2-q^2)=?=(p-q)(p+q)

(p-q)(p+q)=(p-q)*p+(p-q)*q=p^2-qp+pq-q^2=p^2-q^2

a*(b+c)=a*b+a*c

p^2-q^2=p^2-q^2 + pq - pq=p^2-pq+pq-q^2=p(p-q)+q(p-q)=(p-q)(p+q)

a*b + a*c = a( b + c)
г) (x+2y)^2+2(x^2-4y^2)+(2y-x)^2=(x+2y)^2+2(x-2y)(x+2y)+(2y-x)^2=(x+2y)^2-2(-x+2y)(x+2y)+(2y-x)^2=((x+2y)-(2y-x))^2=
=(x+2y-2y+x)^2=(2x)^2=4x^2
x^2-4y^2=(x-2y)(x+2y)

x+x != x^2 =x*x
x+x =1*x + 1*x =
x(1+1)= 2x

(a+b)^2!=a^2 + b^2
(a+b)^2=a^2 +2ab+ b^2

(ab)^2=
ab * ab=a*a*b*b=a^2 * b^2