5) 16/(x+6)(x−1) − 20/(x+2)(x+3) = 1
16/(x+6)(x−1) − 20/(x+2)(x+3) -1=0
[16(x+2)(x+3) −
20(x+6)(x−1)-1(x+2)(x+3)(x+6)(x−1)]/(x+
2)(x+3)(x+6)(x−1) =0
[16x^2+32x+48x+96
-20x^2-120x+20x+120+(-x^2-2x-3x-6)(x
^2+6x-x-6)]/(x+2)(x+3)(x+6)(x−1) =0

16/(x+6)(x−1) − 20/(x+2)(x+3) = 1
16/(x^2+5x-6) − 20/(x^2+5x+6) = 1
x^2+5x=y
16/(y-6) − 20/(y+6) = 1
[16(y+6)-20(y-6)-(y+6)(y-6)]/(y+6)(y-6)
[16y+96-20y+120-y^2+6y-6y+36]/(y+6)(y-6)
[-4y-y^2+252]/(y+6)(y-6)
y^2+4y-252=0 y!=6;-6
D/4=4+252=256
y1=-2+16=14
y2=-2-16=-18
x^2+5x-14=0
x1=-7
x2=2
x^2+5x+18=0
корней нет
Ответ:-7;2

(-x^2-5x-6)(x^2+5x-6)

-x^4-10x^3-29x^2-20x+252

| | -1 | -10 | -29 | -20 | 252 |
|---|---|---|---|---|---|
| 2 | -1 | -12 | -53 | -126 | 0 |
| -7 | -1 | -5 | -18 | 0 | |


x^2+5x+18=0
D=25-4*18=-...

5.5) 6/ (x+1)(x+2) + 8/ (x−1)(x+4) = 1
6/ (x^2+2x+x+2) + 8/ (x^2+4x-x-4) - 1 =0
6/ (x^2+3x+2) + 8/ (x^2+3x-4) - 1 =0
6/ (x^2+3x+2)+ 8/ (x^2+3x+2-6) - 1 =0
y=x^2+3x+2
6/y +8/ (y-6)-1=0
[6(y-6) + 8y -y(y-6)]/y(y-6)=0
[6y-36 + 8y -y^2+6y]/y(y-6)=0
[-y^2+20y-36 ]/y(y-6)=0
y^2-20y+36=0 y!=0 y!=6
y1=2
y2=18
x^2+3x+2=2
x^2+3x=0
x(x+3)=0
x1=0 x2=-3
x^2+3x+2=18
x^2+3x-16=0
D=9+4*16=73
x1,2=(-3+-V73)/2
отв:x1,2=(-3+-V73)/2
x1=0 x2=-3