$$\lim_{x\to 1}\frac{2x^2-3x-5}{x+1}$$

lim[x->1]((2x^2-3x-5)/(x+1)=-3

$$\lim_{x\to \infty}(x^2-2x-3)$$

lim[x->oo](x^2-2x-3)=oo

$$\lim_{x\to \infty}\frac{2x^2-3x-5}{1+x+3x^2}$$

lim[x-oo]((2x^2-3x-5)/(1+x+3x^2)=
lim[x-oo]((2-3/x-5/x^2)/(1/x^2+1/x+3)
=2/3

$$\lim_{x\to \infty}\frac{7x^3+15x^2+9x+1}{5x^4+6x^2-3x-4}$$

(7/x+15/x^2+9/x^3+1/x^4)/(5+6/x^2-
3/x^3-4/x^4)=0/5=0

$$\lim_{x\to \infty}\frac{2x^2-3x-5}{x+1}$$

(2-3/x-5/x^2)/(1/x+1/x^2)=2/0
=oo

$$\lim_{x\to -1}\frac{2x^2-3x-5}{x+1}$$

D=49
2(x-2.5)(x+1)/(x+1)=2x-5=-7

2x^2-3x-5=2(x-2.5)(x+1)

ax^2+bx+c=a*(x-x1)(x-x2)

$$\lim_{x\to 2}\frac{8-2x^2}{x^2+4x-12}$$

2(2-x)(2+x)/(x+6)(x-2)=
-2(x-2)(2+x)/(x+6)(x-2)=
-2(2+x)/(x+6)=-8/8=-1