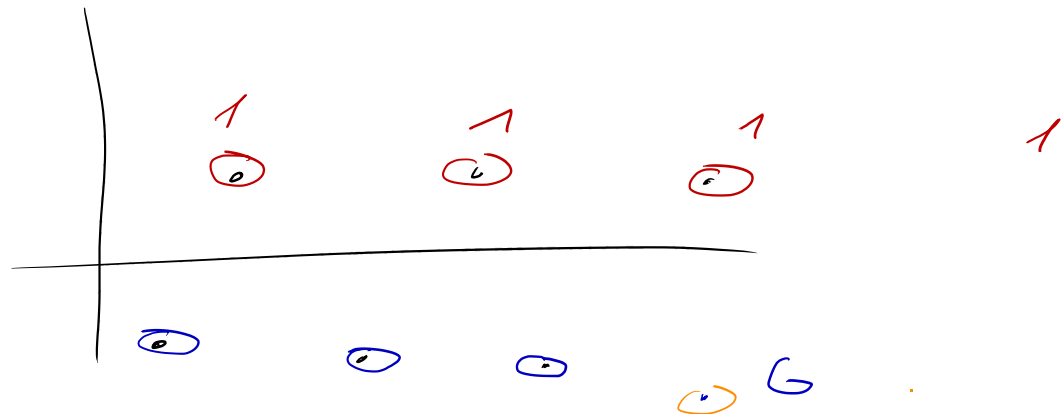


BVW

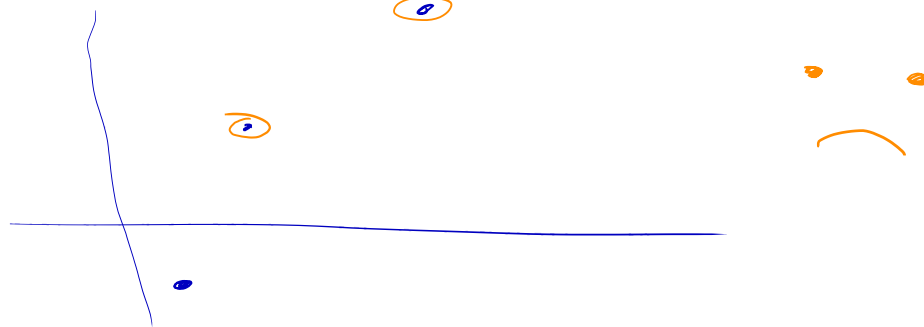
bounded seq. has conv. subseq.

$$a_n = (-1)^n$$

$$a_{2n} = (-1)^{2n} = 1 \quad \checkmark$$



$$(-1)^{2n} = 1$$

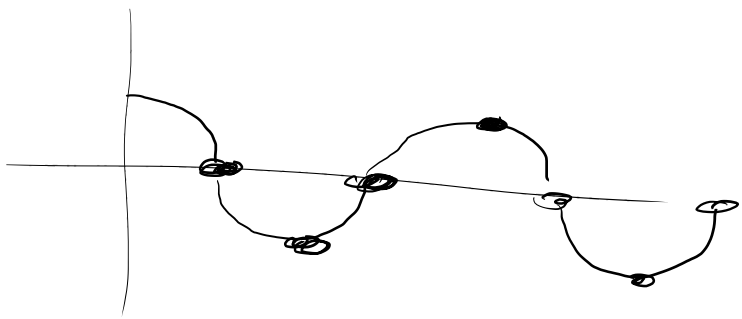
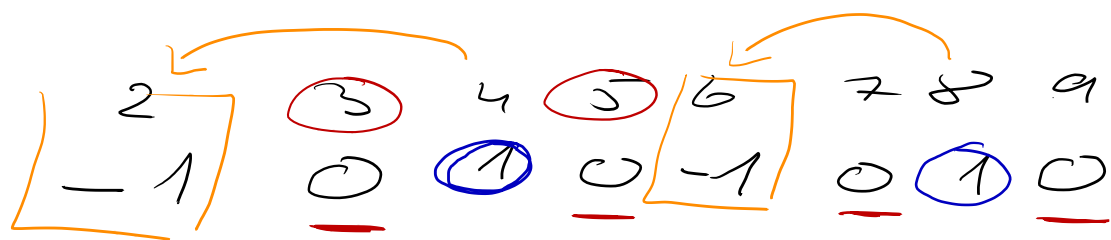


-5

$$a_n = \cos\left(\frac{n\pi}{2}\right)$$

$$n = \textcircled{1}$$

0



a_{2k-1}
 \rightarrow
 odd

~~a_{2k}~~
 \rightarrow
 even

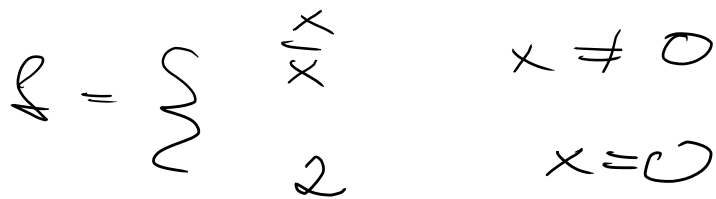
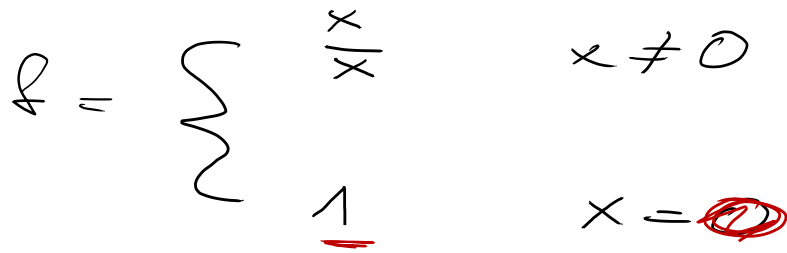
a_{2k}

a_{4k-2}

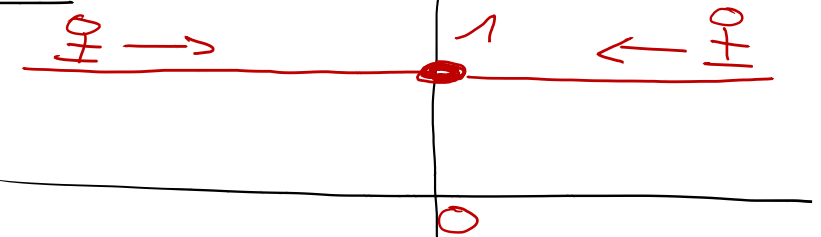
f

point c

$$\lim_{x \rightarrow c} f(x) = f(c)$$



$$\lim_{x \rightarrow 0} f(x) = 1 = f(0) = 1 \quad \checkmark$$



$$\lim_{x \rightarrow 0} f(x) = 1 \quad f(0) = 2$$

