Zadanie 1

1.

a_1 = 3

a_2 = 5

a_7 = 15

a_{n+1} = 2n+3

a_{n+7} = 2n+15

2.

a_1 = 4

a_3 = 16

a_7 = 128

a_{n-2} = 2^{n-1}

a_{n+3} = 2^{n+4}

3.

a_2 = $\frac{2}{3}$

a_4 = $\frac{4}{5}$

a_7 = $\frac{7}{8}$

a_{n-1} = $\frac{n-1}{n}$

a_{2n+3} = $\frac{2n+3}{2n+4}$

4.

a_1 = 1

a_2 = $\frac{1}{4}$

a_3 = $\frac{1}{9}$

a_4 = $\frac{1}{16}$

a_8 = $\frac{1}{64}$

a_9 = $\frac{1}{81}$

a_{2n} = $\frac{(1)^n}{4n^2}$

a_{2n+1} = $\frac{-(1)^n}{4n^2}$

5.

$a_1 = \frac{7}{8}$

$a_2 = \frac{3}{2}$

$a_{n-1} =$

Zadanie 2

1. lim = 1
2. lim = $-\frac{4}{5}$
3. lim = $\frac{4}{3}$
4. lim = -2
5. lim = 4
6. lim = $\frac{1}{3}$
7. lim = $\frac{4}{12}$
8. lim = $-\frac{8}{80}$
9. lim = 0
10. lim = $\frac{125}{27}$
11. lim = 1
12. lim = ∞
13. lim = $\frac{-2}{\sqrt{2}+\sqrt{4}}$
14. lim = $\sqrt{3}$
15. lim = $\sqrt[3]{\frac{1}{8}}$
16. lim = $\frac{\sqrt{1}}{3}$
17. lim = 1
18. lim = $\frac{1}{2}$
19. lim = $\frac{2}{3}$
20. lim =

Zadanie 3

1. lim = 0
2. lim = 0
3. lim = $+\infty$

Zadanie 4

1. lim = $+\infty$
2. lim = $-\infty$
3. lim = $-\infty$