



KURS POCHODNE I BADANIE PRZEBIEGU ZMIENNOŚCI FUNKCJI

Lekcja 9

BADANIE PRZEBIEGU ZMIENNOŚCI FUNKCJI

Odpowiedzi do zadania domowego



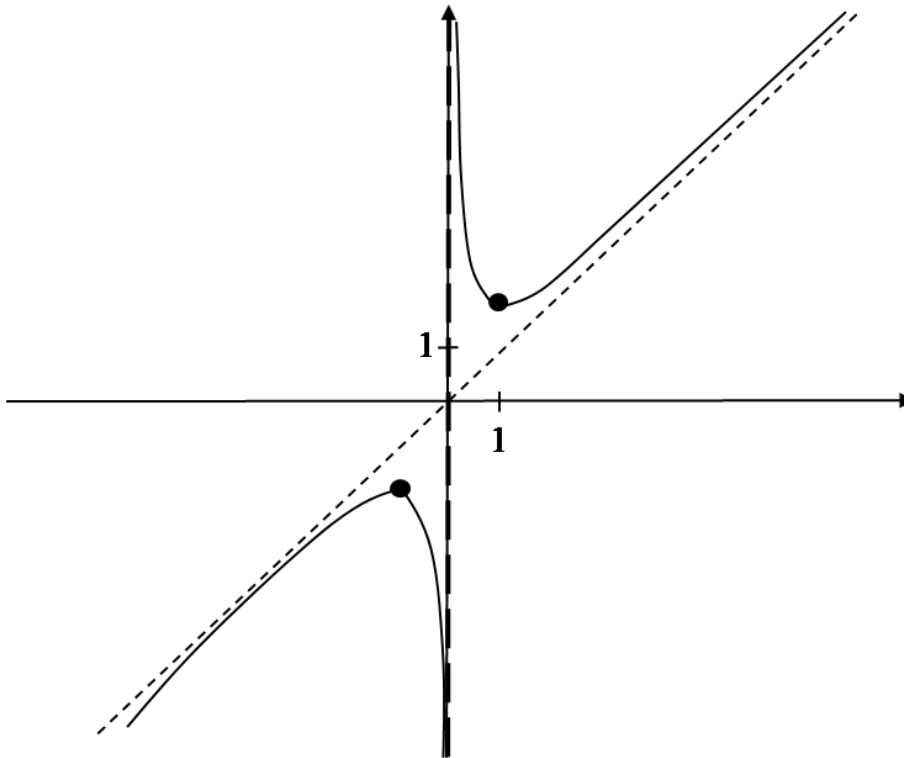
Część 1: TEST

- 1) d
- 2) a
- 3) d
- 4) b
- 5) a
- 6) d
- 7) b
- 8) d
- 9) d
- 10) a

ODPOWIEDZI DO ZADAŃ

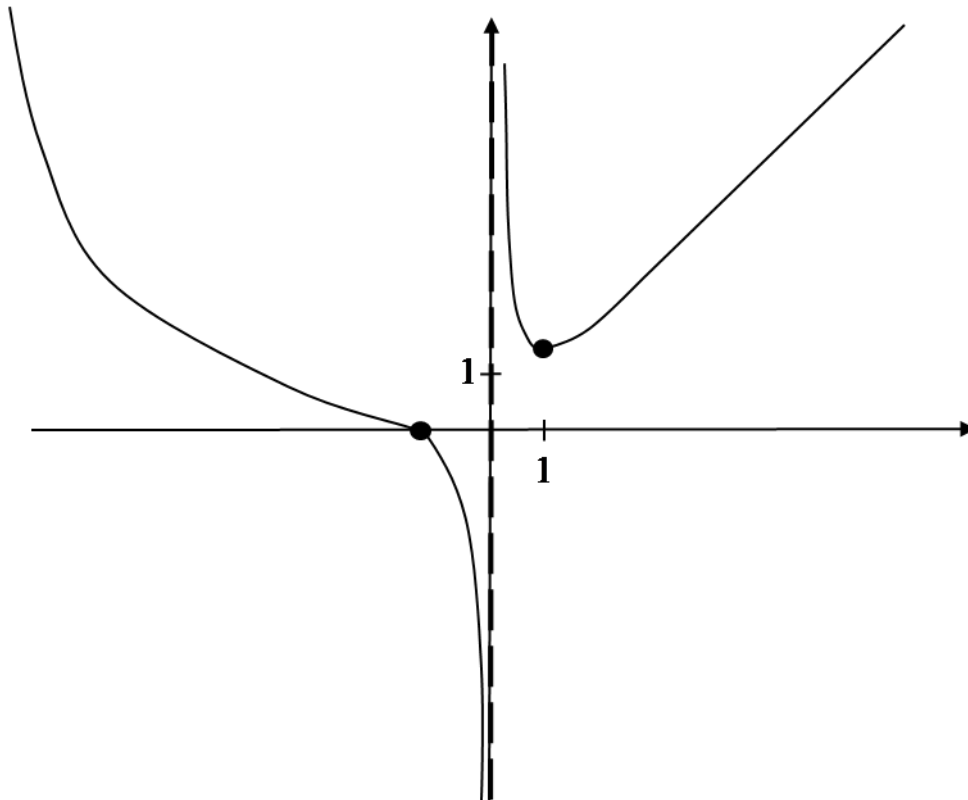
| x | $-\infty$ | $(-\infty, -1)$ | -1 | $(-1, 0)$ | 0 | $(0, 1)$ | 1 | $(1, \infty)$ | ∞ |
|-------|-----------------|--------------------|-------------|-------------------|-----------|----------|------------|--------------------|-----------------|
| y'' | - | - | - | - | \times | + | + | + | + |
| y' | + | + | 0 | - | \times | - | 0 | + | + |
| y | Ukośna $y=x$ | \curvearrowright | Max -2 | \curvearrowleft | $-\infty$ | ∞ | Min 2 | \curvearrowright | Ukośna $y=x$ |

1)



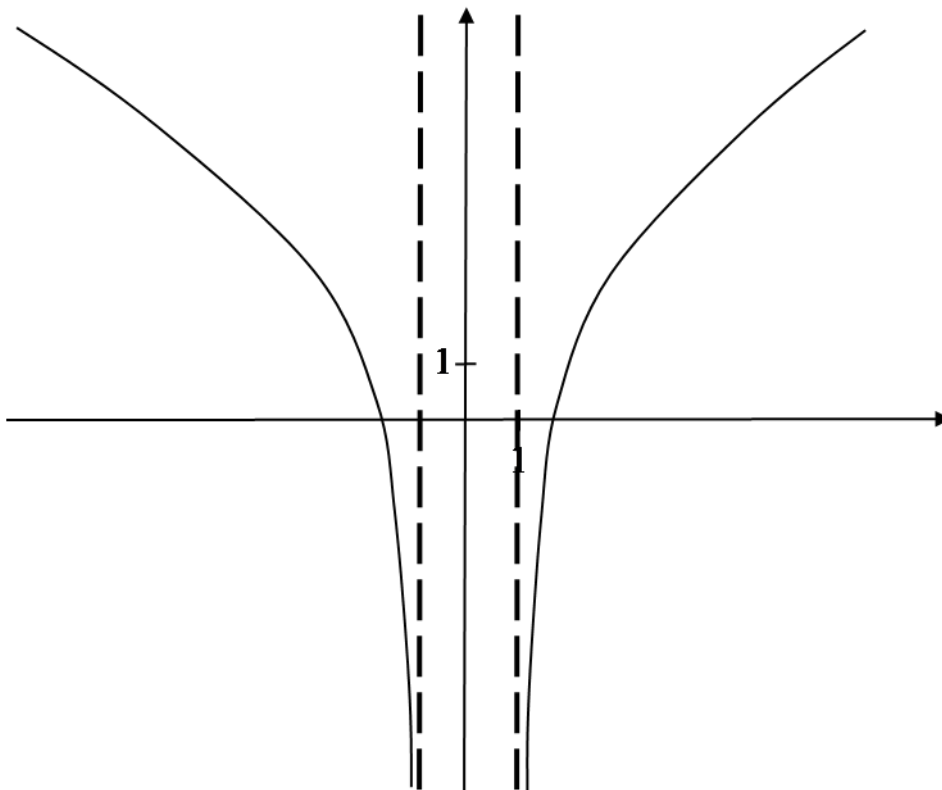
| | | | | | | | | | |
|-------|-----------|---------------------------|-------------------------|---------------------|--------------|----------|----------------------|-------------------|----------|
| x | $-\infty$ | $(-\infty, -\sqrt[3]{2})$ | $-\sqrt[3]{2}$ | $(-\sqrt[3]{2}, 0)$ | 0 | $(0, 1)$ | 1 | $(1, \infty)$ | ∞ |
| y'' | + | + | 0 | - | X | + | + | + | + |
| y' | - | - | - | - | X | - | 0 | + | + |
| y | | \curvearrowright | P_p $-\sqrt[3]{2}$ | \curvearrowright | $-\infty$ | ∞ | $\frac{3}{2}$ Min | \curvearrowleft | |





2)



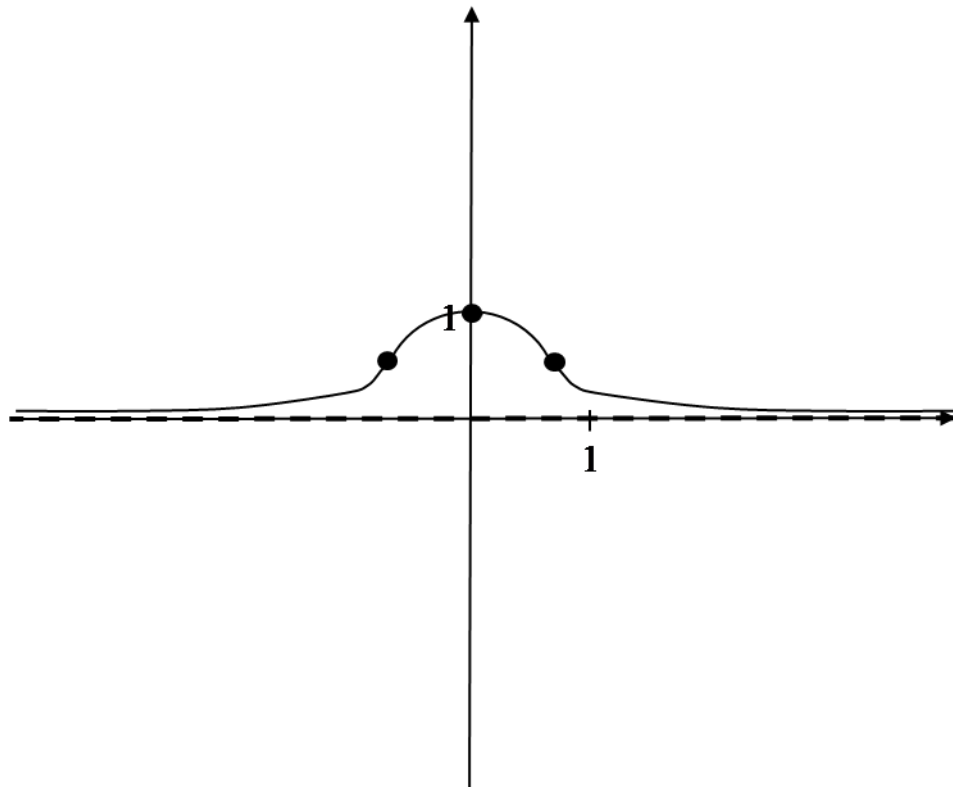
| x | $-\infty$ | $(-\infty, -1)$ | -1 | $(-1, 1)$ | 1 | $(1, \infty)$ | ∞ |
|-------|-----------|-----------------|------|-----------|-----|---------------|----------|
| y'' | - | - | | | | + | + |
| y' | - | - | | | | + | + |
| y | | | | | | | |

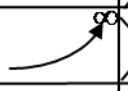



3)



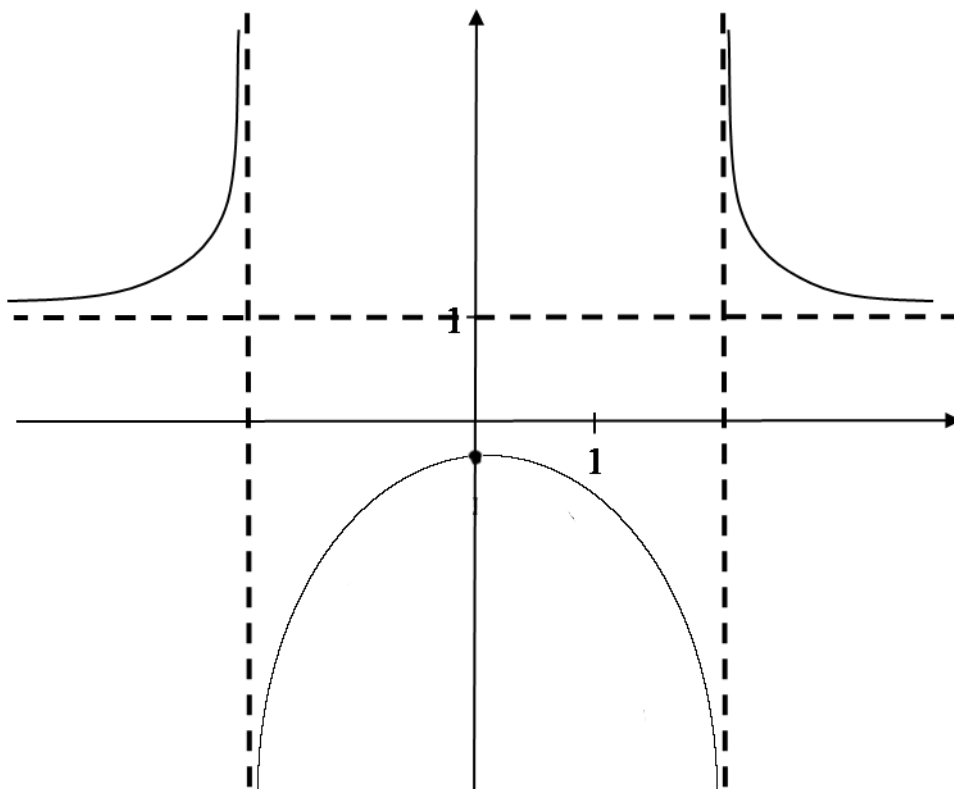
| | | | | | | | | | |
|-------|------------------|---|----------------------------|---|-----------------|---|----------------------------|---|------------------|
| x | $-\infty$ | $(-\infty, -\frac{1}{\sqrt{2}})$ | $-\frac{1}{\sqrt{2}}$ | $(-\frac{1}{\sqrt{2}}, 0)$ | 0 | $(0, \frac{1}{\sqrt{2}})$ | $\frac{1}{\sqrt{2}}$ | $(\frac{1}{\sqrt{2}}, \infty)$ | ∞ |
| y'' | + | + | 0 | - | - | - | 0 | + | + |
| y' | + | + | + | + | 0 | - | - | - | - |
| y | Pozioma $y=0$ |  | Pp $\frac{1}{\sqrt{e}}$ |  | Max 1 |  | Pp $\frac{1}{\sqrt{e}}$ |  | Pozioma $y=0$ |

4)



| | | | | | | | | | |
|------|------------------|---|----------|---|----------------------|---|----------|---|------------------|
| x | $-\infty$ | $(-\infty, -2)$ | -2 | $(-2, 0)$ | 0 | $(0, 2)$ | 2 | $(2, \infty)$ | ∞ |
| | + | + | \times | - | - | - | \times | + | + |
| y' | + | + | \times | + | 0 | - | \times | - | - |
| y | Pozioma $y=1$ |  | \times |  | Max $\frac{1}{4}$ |  | \times |  | Pozioma $y=1$ |

5)



KONIEC