

Matematyka I

Zestaw zadań numer 5

1. Oblicz granice:

$$\lim_{x \rightarrow \infty} \frac{3x^4 + 2x^2 + 5x + 1}{5x^4 + 4x + 2}$$

$$\lim_{x \rightarrow \infty} \frac{6x + 1}{2x^2 + 8x + 4}$$

$$\lim_{x \rightarrow \infty} \frac{8x^6 + 5x^4 - 3x^2 + 4}{2x^6 - 3x^3 + 2x - 5}$$

$$\lim_{x \rightarrow \infty} \frac{10x^3 + 4x^2 - 5}{12x + 4}$$

2. Oblicz granice:

$$\lim_{x \rightarrow 0} \frac{x^4 + 2x^3 + 3x^2 + 4x}{x}$$

$$\lim_{x \rightarrow 0} \frac{3x^4 + 5x^2}{x^2}$$

$$\lim_{x \rightarrow 0} \frac{\sqrt{x+2} - \sqrt{x}}{2}$$

$$\lim_{x \rightarrow 0} \frac{3x^3 + 2x^2}{x^2 + x}$$