

数Ⅲ (数列の極限③)

問 次の極限を求めよ。

$$\textcircled{1} \lim_{n \rightarrow \infty} \frac{n^2 - n + 2}{3n^2 - 5}$$

$$\textcircled{2} \lim_{n \rightarrow \infty} \frac{5n^2 - 1}{4 + n}$$

$$\textcircled{3} \lim_{n \rightarrow \infty} (\sqrt{n+1} - \sqrt{n})$$

$$\textcircled{4} \lim_{n \rightarrow \infty} (\sqrt{n^2 - 2n} - n)$$

$$\textcircled{5} \lim_{n \rightarrow \infty} \frac{4n}{\sqrt{n^2 + n} + 3n}$$

$$\textcircled{6} \lim_{n \rightarrow \infty} \frac{5}{\sqrt{n^2 + 2n} - n}$$