

1) Zjistěte monotónnost a omezenost posloupnosti:

$$a_n = \frac{-2n + 1}{n + 1}$$

$$2) \lim \frac{3n^3 - 1}{-2n^2 + n - 5} =$$

$$\lim \frac{-2n^3 + 5n + 6}{1 - 4n} =$$

$$\lim \frac{2n^2 + 2}{5n^2 - 1} =$$

$$\lim \frac{1}{\sqrt{2n + 8}} =$$

$$\lim \sqrt{2n + 8} =$$

$$\lim \left(-\frac{3}{7} \right)^n =$$

$$\lim \left(\frac{-7}{3} \right)^n =$$

$$\lim (\sqrt{n+1} - \sqrt{n}) =$$

$$\lim (\sqrt{n+1} + \sqrt{n}) =$$

$$\lim \frac{2.5^{n+2} - 3.2^{n-1}}{2^{n+3} + 3.5^{n-1}} =$$

$$\lim \frac{7^n - 11^n}{6^n} =$$

$$\lim \frac{6^n}{7^n - 11^n} =$$

$$\lim \frac{4^n + (-9)^n}{4^n + 10} =$$

$$\lim \frac{4^n + 10}{5^n + (-9)^n} =$$