

$$\lim_{x \rightarrow 3} \frac{\sqrt{x+6} - \sqrt{10x-21}}{5x-15}$$

$$\lim[x \rightarrow 3] ((\sqrt{x+6} - \sqrt{10x-21}) / (5x-15)) =$$

1. $F(x) = \frac{2x^2 + x - 3}{x^3 - 2x + 1}, a = 1;$

2. $F(x) = \frac{\sqrt{x+21} - 5\sqrt{x-3}}{x^3 - 64}, a = 4;$

$$F(x) = \sqrt{x^2 + x + 1} - \sqrt{x^3 - x + 1}, a = +\infty.$$

$$\lim_{x \rightarrow -2} \frac{x^2 + x - 2}{\sqrt{x+6} - 2}$$

$$\lim[x \rightarrow -2] (x^2 + x - 2) / (\sqrt{x+6} - 2) =$$

1) $(2x^2 + x - 3) / (x^3 - 2x + 1) =$

2) $(\sqrt{x+21} - 5\sqrt{x-3}) / (x^3 - 64)$

3) $(\sqrt{x^2 + x + 1} - \sqrt{x^3 - x + 1}) =$