1. $\displaystyle\lim_{x\to 0} \frac{x^2}{x}$

2. $\displaystyle\lim_{x\to 0} \frac{x^2-1}{x-1}$

3. $\displaystyle\lim_{x\to 1} \frac{x^2-1}{x-1}$

4. $\displaystyle\lim_{x\to 2} \frac{x^2-4}{x^2-3x+2}$

5. $\displaystyle\lim_{x\to -4} \frac{x^2+x-12}{x^2+6x+8}$

6. $\displaystyle\lim_{x\to 3/2} \frac{2x^2-7x+6}{2x^2-x-3}$

7. $\displaystyle\lim_{x\to 5} \frac{x^2-10x+25}{x^2-11x+30}$

8. $\displaystyle\lim_{x\to 1} \left(\frac{1}{x-1} - \frac{3}{x^3-1} \right)$

9. $\displaystyle\lim_{x\to 1} \frac{x^3-3x+2}{x^4-4x+3}$

10. $\star\ \displaystyle\lim_{x\to 1} \frac{x^n-1}{x-1}$, kde $n \in \mathbb{N}$

11. $\star\star\ \displaystyle\lim_{x\to 1} \frac{x^{100}-2x+1}{x^{50}-2x+1}$

12. $\displaystyle\lim_{x\to 0} \frac{x}{\sin x}$

13. $\displaystyle\lim_{x\to 0} \frac{1-\cos x}{x}$

14. $\displaystyle\lim_{x\to 0} \frac{\sin x}{\mathrm{e}^x - 1}$