4. mintest – Matematika MI, 29.10.

$$\lim_{x\to 2} \frac{\ln\left(\frac{x}{2}\right)}{2x-x^2} = \lim_{x\to 2} \frac{\ln\left(\frac{x}{2}\right)}{\frac{x}{2}-1} \cdot \frac{\frac{x}{2}-1}{x(2-x)} =$$

$$\overset{\text{VONAL}}{=} \underbrace{\lim_{x\to 2} \frac{\ln\left(\frac{x}{2}\right)}{\frac{x}{2}-1}}_{\overset{\text{VONAL}}{=} 1} \cdot \lim_{x\to 2} \frac{\frac{x-2}{2}}{x(2-x)} =$$

$$= \frac{1}{2} \cdot \lim_{x\to 2} \frac{x-2}{x\cdot(-1)\cdot(x-2)} = \frac{1}{2}\cdot\left(-\frac{1}{2}\right) = -\frac{1}{4}.$$