

# Stanoviště: 6c. — Matematický koutek pro pokročilé



Není-li jasné stanoveno jinak, smíte si vzít 2 kopie zadání. Luštěte mimo dohled aspoň 100 m od stanoviště.

$$\forall a, b, c, d, e, f \in \mathbb{N}: b = \frac{d^2}{5} = \left(\frac{e+1}{4}\right) \Leftrightarrow d = \frac{a+1}{3} = 5; c = b^2 - 7$$

$$g(x) = \begin{bmatrix} a & 13 & c^3 & 0 \\ -a^2 & e^5 & a^3 & d^1 \\ d^4 & b^4 & e & 0 \\ -c & 0 & -c^2 & b \end{bmatrix}$$

$$h(x) = d^4 \iint_{-\infty}^{\infty} \pi c^2 + \frac{a^4 \ln \frac{c^3}{e}}{\tan^{-1}(a^3 + e^3)} + \frac{15a^2}{be^2}$$

$$i(x) = \cos\left(\frac{\frac{ab + c^4 d^4 - e}{\pi} + 3a^4 + c^2}{\frac{d}{a} + c}\right) - \sin\frac{c^3 + b^4 + \sqrt{\pi}}{\log e^4}$$

$$j(x) = 14 \begin{bmatrix} bc & 0 & b^4 c^4 d^4 \\ 0 & \sqrt{a^3 e^3} & 0 \\ a^2 & 0 & de^2 \end{bmatrix}$$

$$k(x) = \frac{a^3 bd}{e^3} + \frac{e^4(a^2 - c) - e^2}{(a^4 - 1)!} - \sum_{-\infty}^0 \frac{a - e}{c^2}$$

$$l(x) = \frac{-a \pm b \sqrt{(b^4 e^3 - \frac{c}{e} + da^3 + 13)}}{\sin(a^2 + d^4 + \pi) - \frac{c^4}{e^2}}$$

$$m(x) = - \oint_0^\infty \frac{abd^2 - \frac{a^5 c}{18}}{\tan(\frac{e^3}{d^4 + c^5} + \frac{\pi}{b^5})}$$

$$n(x) = -9 \begin{bmatrix} a^2 + c^2 \\ e^2 - \ln(a^3 d^2) \\ b^2 - e^3 \end{bmatrix} + ae$$

$$o(x) = \lim_{x \rightarrow \infty} \left( \frac{26}{x} \sqrt{\frac{ab^5 - \frac{bc^5}{d} + e}{a^5 + \frac{\ln(c - d^5)}{d^4 - b^2}}} - \frac{\cos(c^3 - \pi)}{\sqrt{e^5}} \right)$$

$$p(x) = 11c^2 - \frac{\cos^{-1}\left(\frac{abe^2}{\sqrt{\pi+d}} + e^4\right) - \tan\frac{\sqrt[3]{a^2 c}}{a^4 e + \pi}}{a^3 - e^3}$$

$$q(x) = \iiint_{-\infty}^{\infty} \frac{\ln ab^3 + \sqrt{\frac{a^2 - (c^3 + d^3)}{a^5 - e^3}}}{a^4 - 1} - \sum_0^\infty a^3$$

$$T(x) = p(x) + l(x) + k(x) + h(x) + q(x) + n(x) + o(x) + o(x) + j(x) + m(x) + k(x) + i(x) + g(x) + n(x) + h(x) + q(x) + p(x)$$