

1. Evaluate:

a) $125^{2/3}$

b) $\left(\frac{e^2}{\sqrt{e}}\right)^{4/3}$

c) $\ln e^{5x}$

2. Expand: $\ln\left(\frac{x^3}{(x-2)\sqrt{1+x^2}}\right)$

3. Solve: $5 + 5e^{-0.1x} = 15$

4. Solve: $2 \ln(3x) - 1 = 7$

Q: A man rode his horse into town on Tuesday. Two days later he rode home on Tuesday. How is this possible?