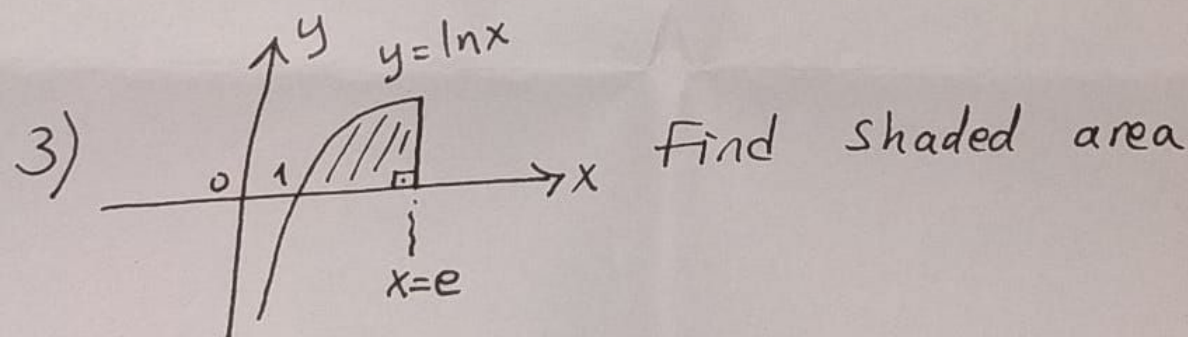


Solve 3 questions.

$$1) \quad x \cdot F = \frac{1}{\int_5^{\tan x} \ln t \, dt} \quad \frac{dF}{dx} = ?$$

$$2) \quad \text{Evaluate } \int_{-4}^4 \sqrt{16-x^2} \, dx.$$



4) Shaded area is rotated about the line $x=e$.
 given in 3rd question
 Find volume of generated solid.

GOOD LUCK...

45 min.

Emre GÜVEN