

	Navn:		Skole:	
	Klasse: 20		Dato: 21. september 2022	Fag: Matematik A

## Opgave Sys 612

$$f'(x) = \ln(x)$$

Find stamfunktion

$$F(x) = \int \ln(x) \, dx$$

$$F(x) = \ln(x) \cdot x - x + K$$

Find funktion der går gennem punkt P

$$P(1; 1)$$

$$F(1) = 1$$

$$\ln(1) \cdot 1 - 1 + K = 1$$

$$K = 1 - \ln(1) \cdot 1 + 1$$

$$K = 2$$

$$F(x) = \ln(x) \cdot x - x + 2$$

## Cas

$$F(x) = \int \ln(x) \, dx$$

$$\text{Define: } F(x) = \ln(x) \cdot x - x + K$$

$$P(1; 1)$$

$$F(1) = 1$$



*The equation is solved for K by WordMat.*

$$K = 2$$