

1. If you approximate  $\sqrt{26}$  using a linearization for the function  $f(x) = \sqrt{x}$ , which of the following approximations do you end up with?

(A)  $\sqrt{26} \approx 5$

(B)  $\sqrt{26} \approx 5.1$

(C)  $\sqrt{26} \approx 5.2$

(D) None of the above

## 2. True or False?

If we approximate  $\ln(0.97)$  using a linearization for the function  $f(x) = \ln(x)$ , we end up overestimating the true value of  $\ln(0.97)$ .

### 3. True or False?

The point  $(2, 1)$  is on the depicted curve

$$y^3 + 3xy = 7.$$

Then the  $y$ -coordinate of the point on the curve where  $x = 2.1$  is between  $2.9/3$  and  $1$ .

