1. If you approximate $\sqrt{26}$ using a linear approximation 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

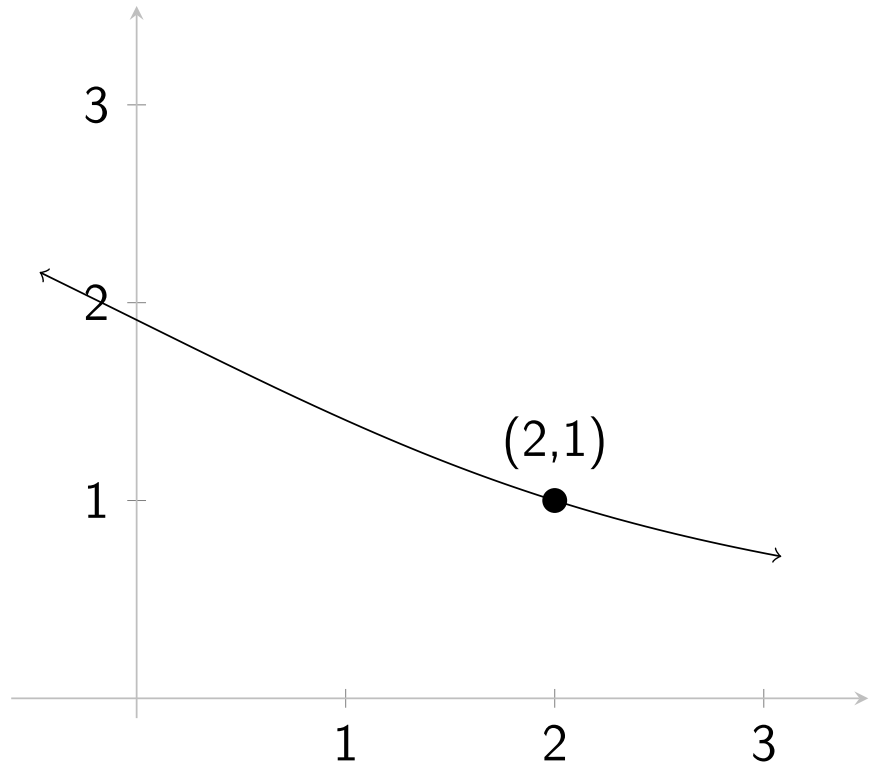
2. True or False?

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

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

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

depicted to the right.



3. True or False?

The y-coordinate of the point on the curve where $x = 2.1$ is between $29/30$ and 1.