1. For the function $f(x)=1 / x$ compute the derivative function from the definition using limits.
2. Find the equation of the tangent line to the curve $y=1 / x$ at $x=2$.
3. Use the derivative approximation at $x=2$ to estimate $\frac{1}{2.1}$.

For each of the remaining problems I have sketched for you the graph of $f(x)$. Your job: sketch $f^{\prime}(x)$.
4.

5.

6.

7.

8.

9.

10.


