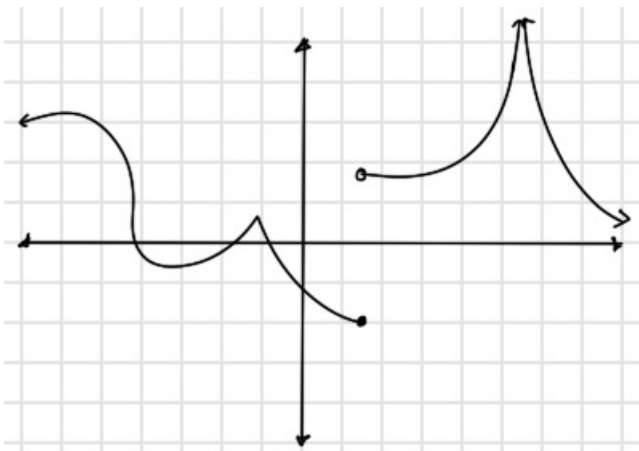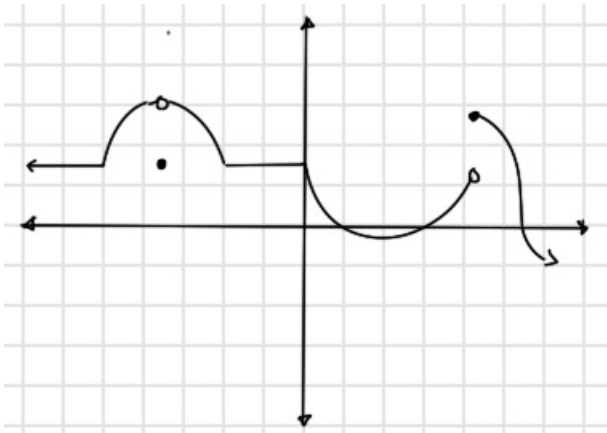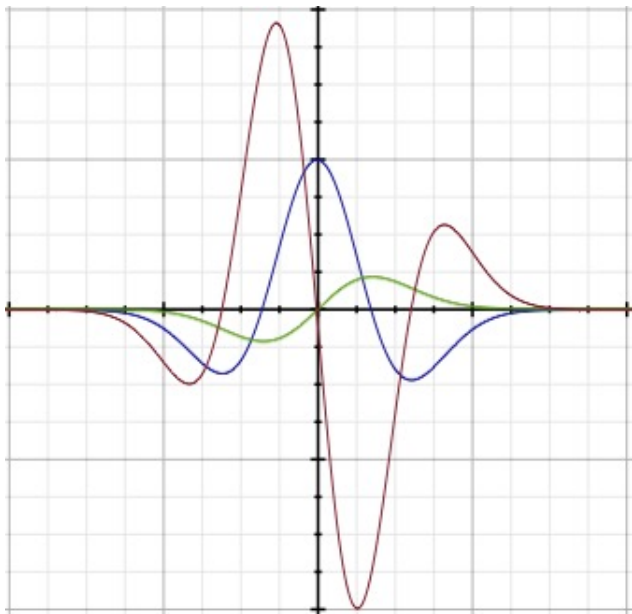1. Find the derivative of $f(x) = 7x - 3$ using the definition of the derivative.

2. Find the derivative of $f(x) = 3x^2 + 2x$ using the definition of the derivative.

3. Find the derivative of $f(x) = \dfrac{x^2 + 1}{x - 1}$ using the definition of the derivative.

4. Find the derivative of $f(x) = \sqrt{3 - x}$ using the definition of the derivative.

5. Given $f(x) = |3x - 6|$, find f' and state its domain.

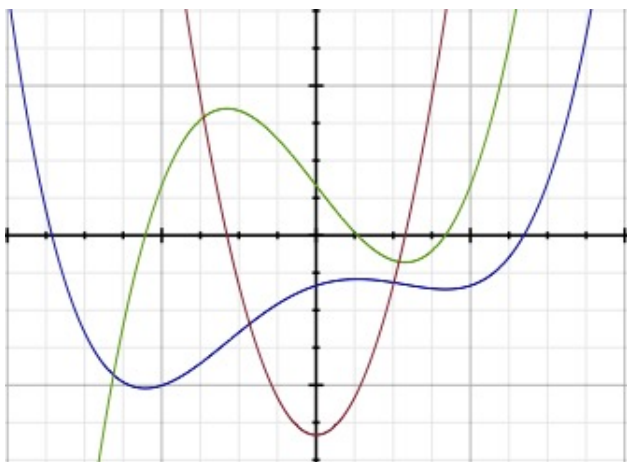6. The graph of f is given. State, with reasons, where f is not differentiable.

7. The graph of f is given. State, with reasons, where f is not differentiable.

8. The figure below shows the graphs of f, f', and f'', Identify each, and explain your reasoning.

9. The figure below shows the graphs of f, f', and f'', Identify each, and explain your reasoning.

10. The figure below shows the graphs of f, f', f'' and f''', Identify each, and explain your reasoning.