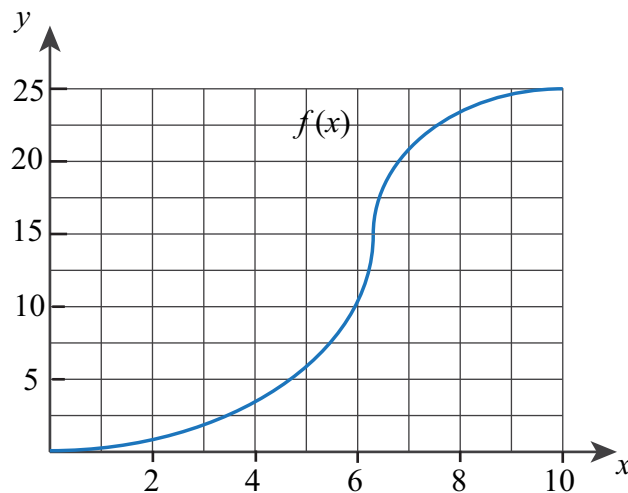
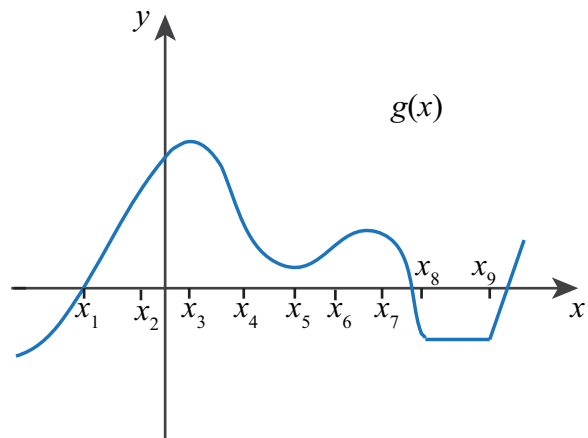


Tangent Lines and Derivatives Worksheet



1. Estimate $f'(5)$.
2. Estimate the average rate of change of f on $[0, 4]$.
3. Estimate the derivative of f at $x = 6.2$.
4. Draw $f'(7)$ on the above graph and estimate its value.
5. If $f(1) = a$ and $f'(1) = -1$, use local linearization to approximate $f(1 - h)$.



6. Find a relation between $g'(x_2)$ and $\frac{g(x_1) - g(x_3)}{x_3 - x_1}$.
7. Compare $g'(x_4)$ and $g'(x_7)$.
8. Compare $g'(x_3)$ and $g'(x_1)$.
9. Estimate $g'(x_9)$.
10. Which is greater: $g'(x_8)$ or x_1 ?

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