

Name: _____

Date: _____

Scaffolded Practice: Average Rate of Change on a Graph

For problems 1–7, use the given information to determine whether the function described is *linear*, *quadratic*, or *exponential*.

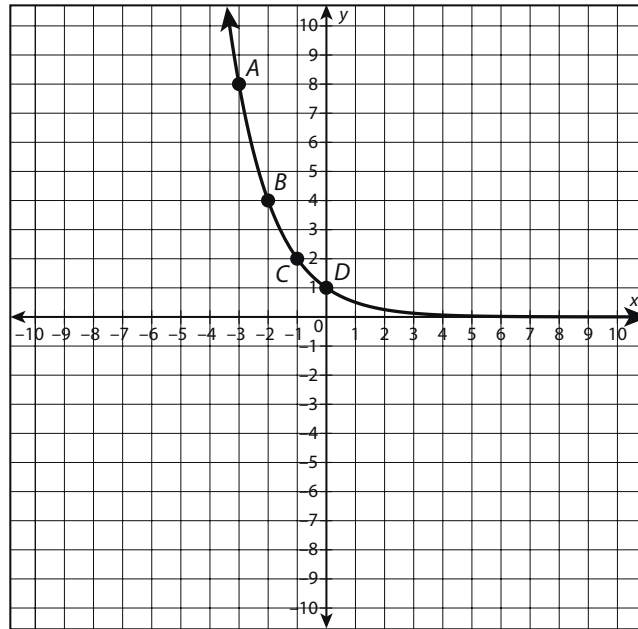
1. The rate of change varies over different intervals.
2. The rate of change is also referred to as the slope.
3. There is neither a constant rate of change nor a constant multiple.
4. The graph will either increase or decrease, but will not change direction.
5. The graph will display a constant rate of change.
6. The rate of change will increase or decrease by a constant multiple.
7. The rate of change will increase on one side of the graph and decrease on the other side of the graph.

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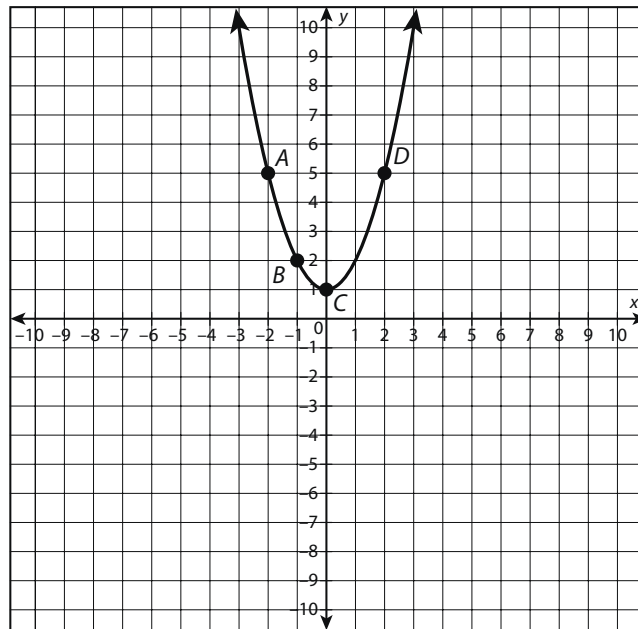
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8. The graph of the exponential function $f(x) = \left(\frac{1}{2}\right)^x$ is shown below. Find the rates of change between points A and B , between points B and C , and between points C and D .



9. The graph of the quadratic function $f(x) = x^2 + 1$ is shown below. Find the rates of change between points A and B , between points B and C , and between points C and D .



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10. The graph of the linear function $f(x) = 3x - 1$ is shown below. Find the rates of change between points A and B , between points B and C , and between points C and D .

