Matching the graph of a function to the graph of its derivative

5/5 points (100%)

Practice Quiz, 5 questions

Congratulations! You passed!

Next Item

1 / 1 points

1.

In this quiz you will practice estimating the derivative of a function by choosing the most suitable graphs.

Estimate the gradient of the tangent to the function at the point $(4, 2)$ based on the image below.

- The gradient is -1.
- The gradient is 0.

The gradient is 1.

Correct

Change in y divided by the change in x gives the gradient of a straight line (the tangent).

The gradient is 2.

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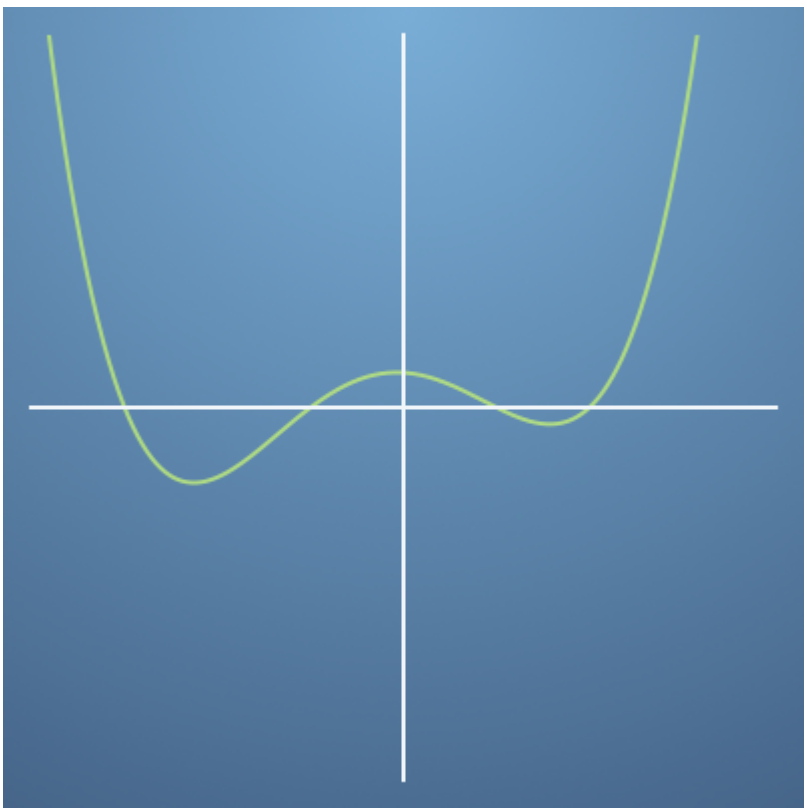
5/5 points (100%)

1 / 1 points

2.

Which diagram best describes the differential of the function in the following graph?



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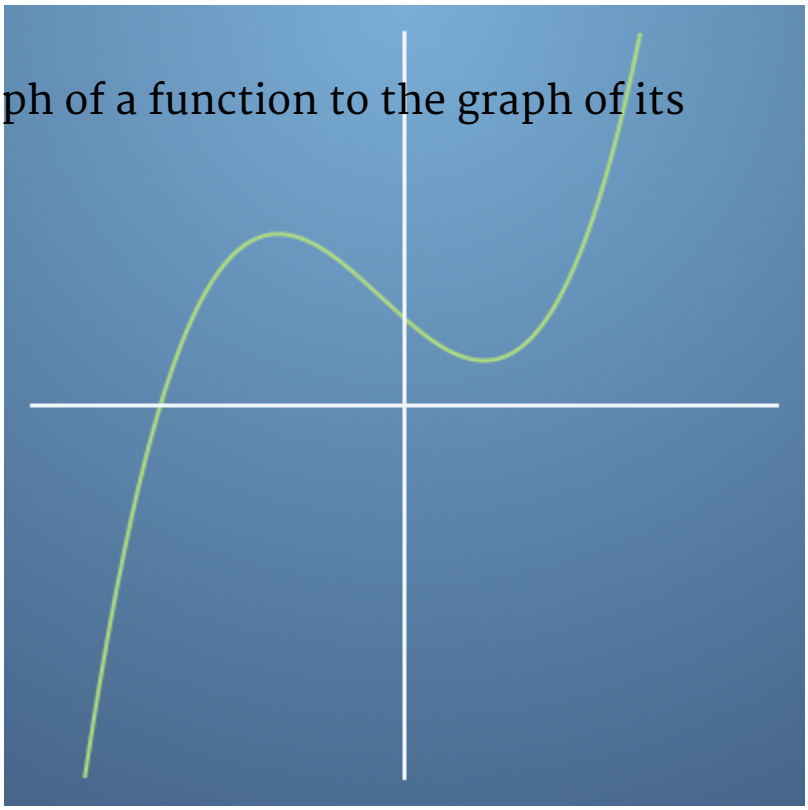

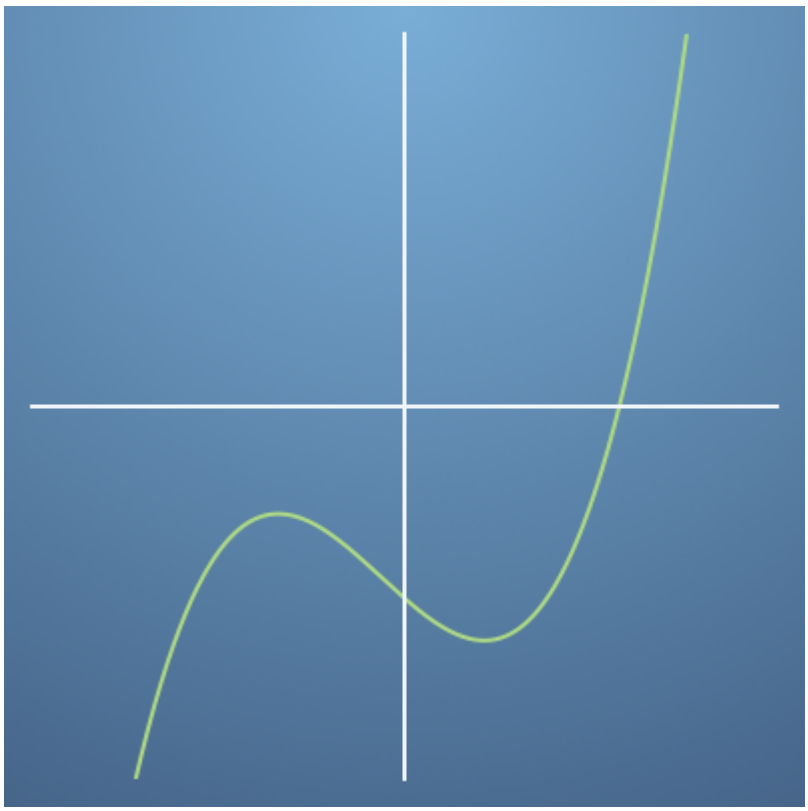

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Correct

This figure best describes how the function changes with x.

1 / 1 points

3.

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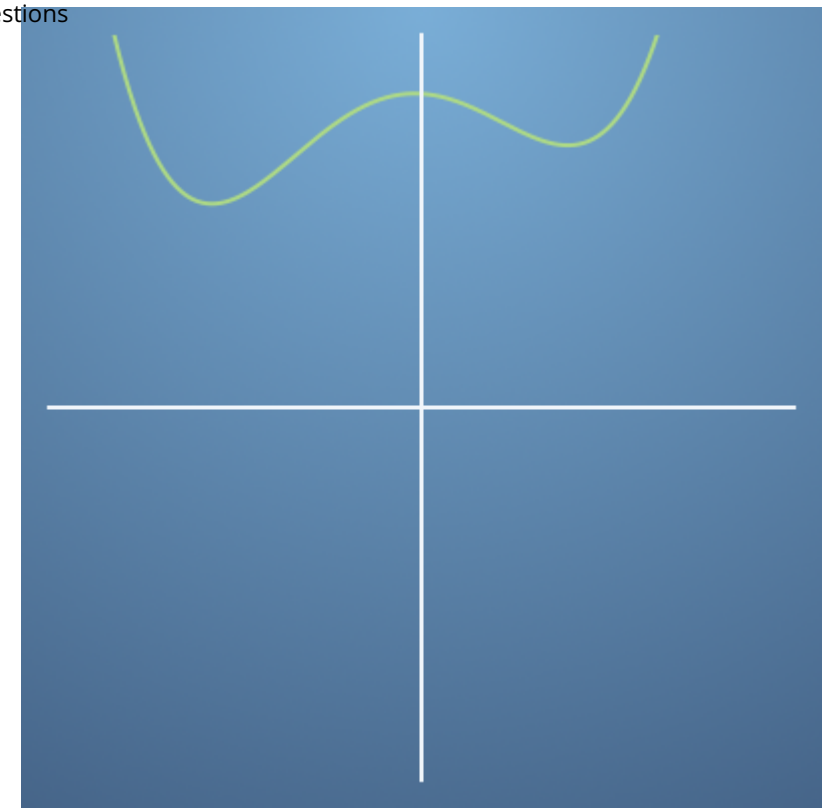
5/5 points (100%)

Practice Quiz, 5 questions

Which diagram best describes the differential of the function in the following diagram?



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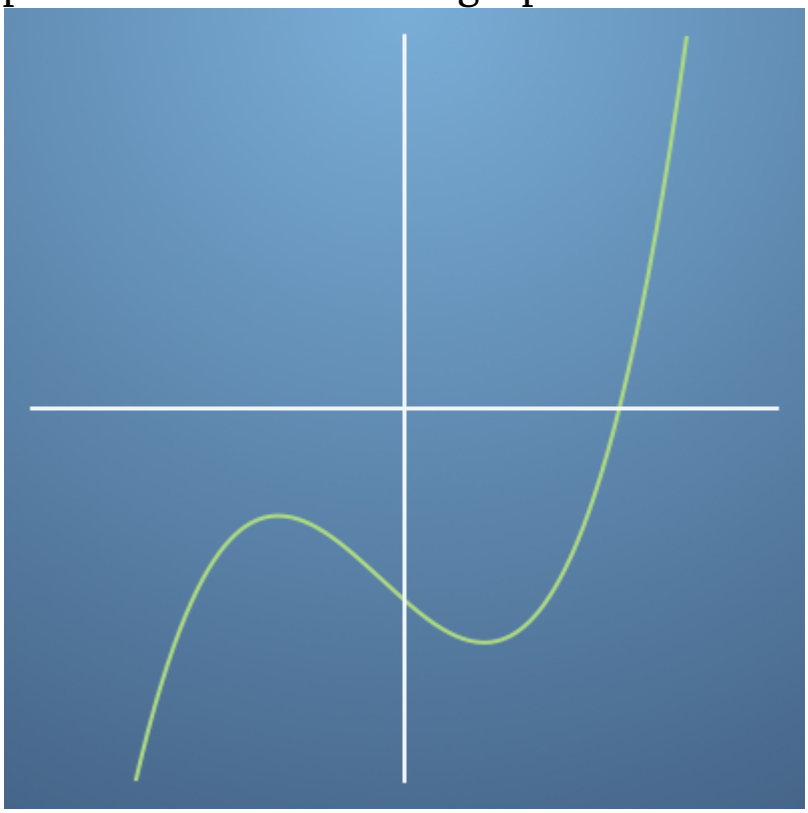

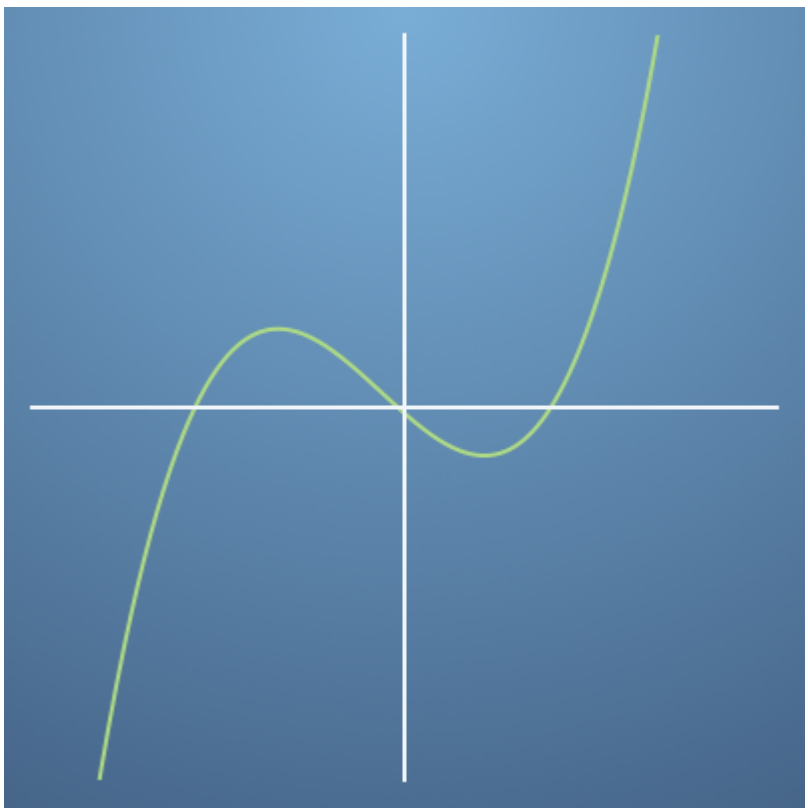

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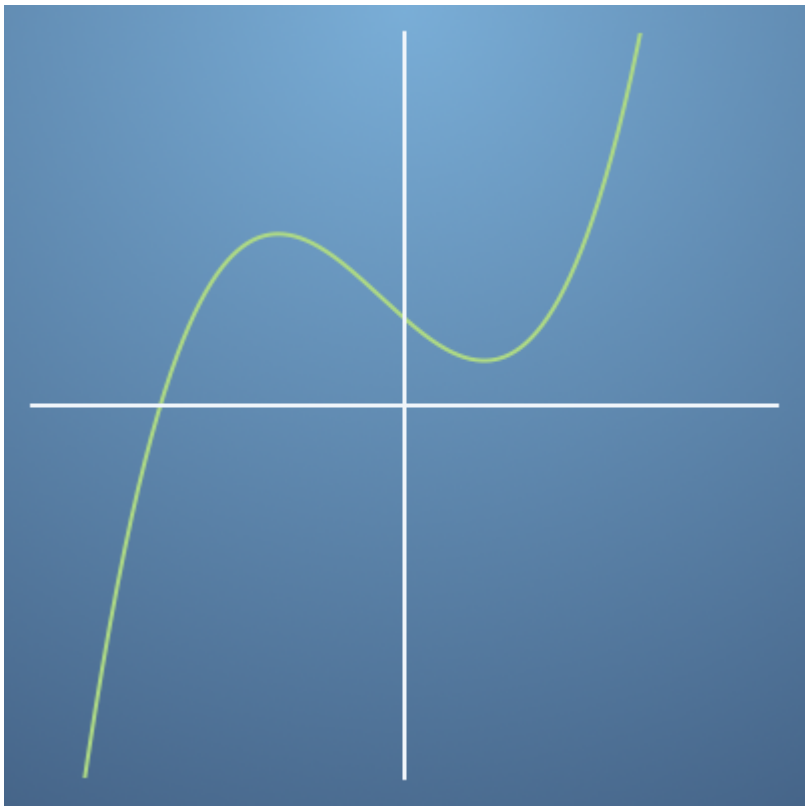
Correct

Shifting a function up or down does not change the gradient at all.

5/5 points (100%)



1 / 1 points

4.

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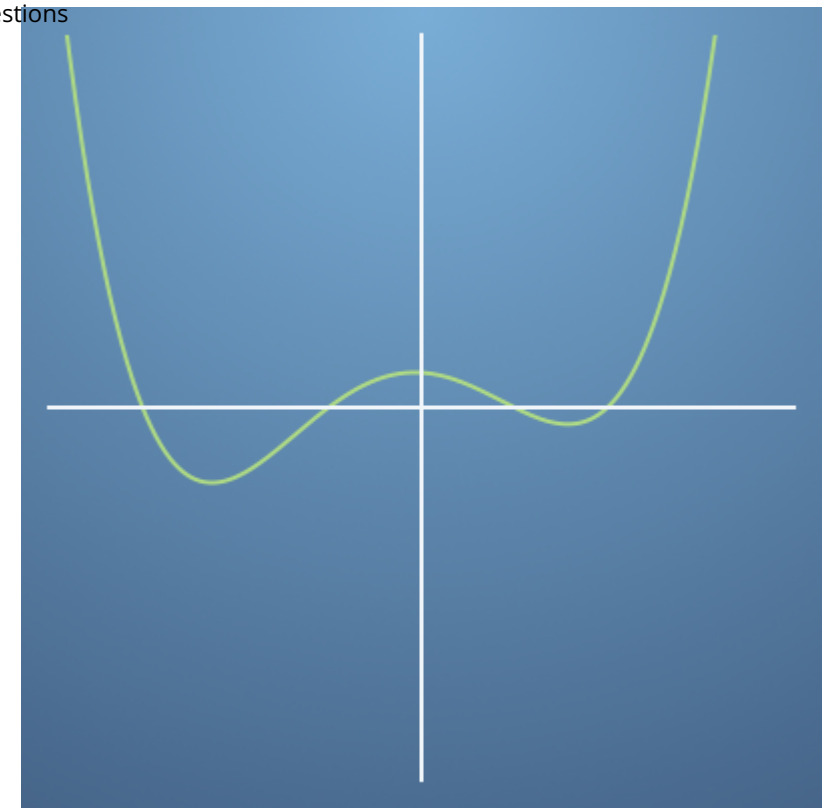
5/5 points (100%)

Practice Quiz, 5 questions

Which diagram(s) has a differential **described by** the following image? Choose all correct answers.



Un-selected is correct

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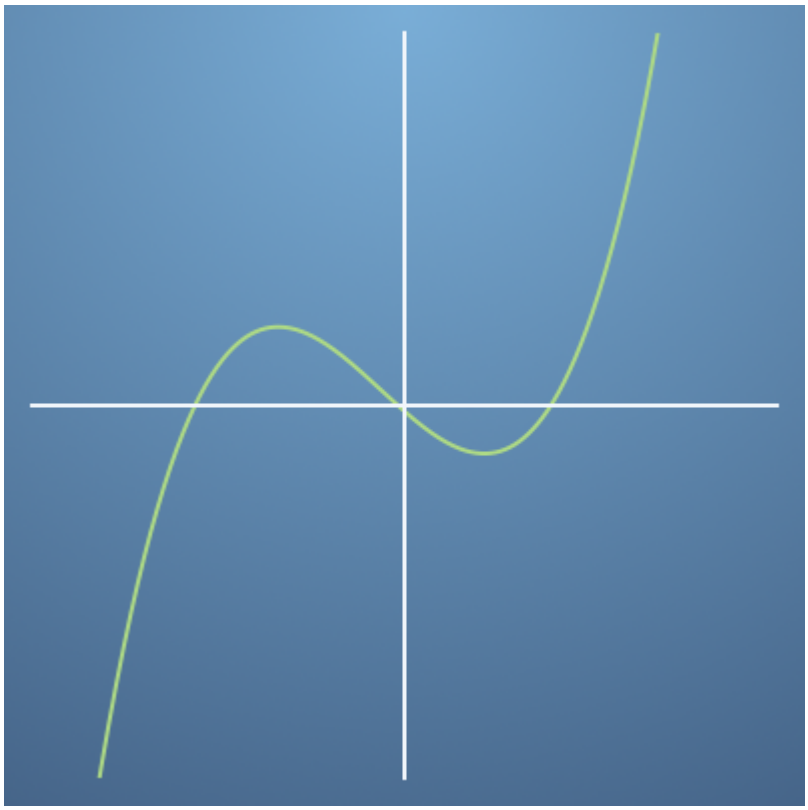
Practice Quiz, 5 questions



Un-selected is correct

Correct

Well done! If one function is a vertical shift of another function, then they have the same differential.

Correct

Well done! If one function is a vertical shift of another function, then they have the same differential.

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1 / 1 points

5.

What is the derivative at 0 for the function in the graph below?

- The derivative is -1.
- The derivative is 0.
- The derivative is 1.
- No derivative exists.

Correct

Derivatives are not well defined at points that don't look "smooth".