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Formative Assessment Rates of Change, Slopes of lines, Equation of tangent line

Use the function  and the point P, given by x = 6 to answer the following questions

1. Determine the slope of the secant PQ when Q has x value 7. ( Approximate to four decimal places)

m of PQ =\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What does this slope represent related to the rate of change?
2. Determine the slope of the secant PT when T has x value 6.01. ( Approximate to four decimal places)

m of PT =\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What does this slope of PT represent related to the rate of change?
2. If we were to find the slope of PW with W = 6.0001, then this slope would have two distinct purposes.

Name them and be specific

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1. Write the equation of the line that best approximates the tangent line to f(x) at P in point slope form

Recall y = m(x-x1)+y1 is point slope form (modified)

Use the function  and the point P, given by x = 0 to answer the following questions

1. Determine the slope of the secant PQ when Q has x value 1. ( Approximate to four decimal places)

m of PQ =\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What does this slope represent related to the rate of change?
2. Determine the slope of the secant PT when T has x value 0.01. ( Approximate to four decimal places)

m of PT =\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What does this slope of PT represent related to the rate of change?
2. Write the equation of the line that best approximates the tangent line to f(x) at P in point slope form

Recall y = m(x-x1)+y1 is point slope form (modified)

1. Verbally explain what each of these tells us in the context of the function g(x) be specific!

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Formative Assessment Rates of Change, Slopes of lines, Equation of tangent line

Use the function  and the point P, given by x = 7 to answer the following questions

1. Determine the slope of the secant PQ when Q has x value 8. ( Approximate to four decimal places)

m of PQ =\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What does this slope represent related to the rate of change?
2. Determine the slope of the secant PT when T has x value 7.01. ( Approximate to four decimal places)

m of PT =\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What does this slope of PT represent related to the rate of change?
2. If we were to find the slope of PW with W = 7.0001, then this slope would have two distinct purposes.

Name them and be specific

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1. Write the equation of the line that best approximates the tangent line to f(x) at P in point slope form

Recall y = m(x-x1)+y1 is point slope form (modified)

Use the function  and the point P, given by x = 2 to answer the following questions

1. Determine the slope of the secant PQ when Q has x value 3. ( Approximate to four decimal places)

m of PQ =\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What does this slope represent related to the rate of change?
2. Determine the slope of the secant PT when T has x value 2.01. ( Approximate to four decimal places)

m of PT =\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What does this slope of PT represent related to the rate of change?
2. Write the equation of the line that best approximates the tangent line to f(x) at P in point slope form

Recall y = m(x-x1)+y1 is point slope form (modified)

1. Verbally explain what each of these tells us in the context of the function g(x) be specific!

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Formative Assessment Rates of Change, Slopes of lines, Equation of tangent line

Use the function  and the point P, given by x = -1 to answer the following questions

1. Determine the slope of the secant PQ when Q has x value 0 ( Approximate to four decimal places)

m of PQ =\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What does this slope represent related to the rate of change?
2. Determine the slope of the secant PT when T has x value -0.99. ( Approximate to four decimal places)

m of PT =\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What does this slope of PT represent related to the rate of change?
2. If we were to find the slope of PW with W = -0.999, then this slope would have two distinct purposes.

Name them and be specific

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1. Write the equation of the line that best approximates the tangent line to f(x) at P in point slope form

Recall y = m(x-x1)+y1 is point slope form (modified)

Use the function  and the point P, given by x = 1 to answer the following questions

1. Determine the slope of the secant PQ when Q has x value 2. ( Approximate to four decimal places)

m of PQ =\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What does this slope represent related to the rate of change?
2. Determine the slope of the secant PT when T has x value 1.01. ( Approximate to four decimal places)

m of PT =\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What does this slope of PT represent related to the rate of change?
2. Write the equation of the line that best approximates the tangent line to f(x) at P in point slope form

Recall y = m(x-x1)+y1 is point slope form (modified)

1. Verbally explain what each of these tells us in the context of the function g(x) be specific!

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Formative Assessment Rates of Change, Slopes of lines, Equation of tangent line

Use the function  and the point P, given by x = -1 to answer the following questions

1. Determine the slope of the secant PQ when Q has x value 0 ( Approximate to four decimal places)

m of PQ =\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What does this slope represent related to the rate of change?
2. Determine the slope of the secant PT when T has x value -0.99. ( Approximate to four decimal places)

m of PT =\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What does this slope of PT represent related to the rate of change?
2. If we were to find the slope of PW with W = -0.999, then this slope would have two distinct purposes.

Name them and be specific

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1. Write the equation of the line that best approximates the tangent line to f(x) at P in point slope form

Recall y = m(x-x1)+y1 is point slope form (modified)

Use the function  and the point P, given by x = 2 to answer the following questions

1. Determine the slope of the secant PQ when Q has x value 3. ( Approximate to four decimal places)

m of PQ =\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What does this slope represent related to the rate of change?
2. Determine the slope of the secant PT when T has x value 2.01. ( Approximate to four decimal places)

m of PT =\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What does this slope of PT represent related to the rate of change?
2. Write the equation of the line that best approximates the tangent line to f(x) at P in point slope form

Recall y = m(x-x1)+y1 is point slope form (modified)

1. Verbally explain what each of these tells us in the context of the function g(x) be specific!







