Quiz Wednesday: Homework MathXL

1. Use the definition $f'(a) = \lim_{x \to a} \frac{f(x) - f(a)}{x - a}$

to determine the derivative of the given function at the given value of a

3.1 #7

2. Find the equation of a tangent line to a parabola at a given point.

3.1 #25 plus equation for the line

3. Given an equation, determine the values x for which a function is differentiable.

3.2 #31

4. Find $\frac{dy}{dx}$ for a polynomial function.

3.3 #5

5. Find dy/dx using the product rule.

3.3 #13

6. Match the graph of a function with its derivative.

3.1 # 13-16

7. Find dy/dx using the quotient rule.

3.3 #17

8. Given the graph of a function, determine where it is continuous, differentiable, not differentiable.

3.2 # 5-10

9. Find the horizontal tangents to the curve of a polynomial (at x=).

3.3 #7

9. Calculate the derivative of a product or a quotient given numerical values.

3.3 #23

10. Find the slope of a line tangent to the curve at the given value of x. (a polynomial)

3.3 #25

11. Find higher order derivatives.

3.3 #33

12. Find an equation of the line perpendicular to the tangent to a curve at a given point. (a polynomial)

3.3 #37