Name: _____ Score: _____

Teacher: _____ Date: _____

Introduction to derivative

Use the definition of the derivative to find the derivative of the following functions.

1. $f(x) = 6$

2. $V(t) = 3 - 14t$

3. $g(x) = x^2$

4. $Q(t) = 10 + 5t - t^2$

5. $W(z) = 4z^2 - 9z$

6. $f(x) = 2x^3 - 1$

7. $g(x) = x^3 - 2x^2 + x - 1$

8. $R(z) = \dfrac{5}{z}$

9. $V(t) = \dfrac{t+1}{t+4}$

10. $Z(t) = \sqrt{3t - 4}$

11. $f(x) = \sqrt{1 - 9x}$

12. $f(x) = \sqrt{2x}$