3-9. $\sum_{i=0}^{5} \frac{1}{3} g(-1 + \frac{1}{3} i)$

3-10. Answers vary.

3-11. $f'(x) = 6x^2$

3-12. See below:

a. 2

b. $2x + 1$

3-13. –4, –2: continuous; 0, 2: not continuous; 0: limit does not exist; 2: $f(2)$ and limit do not exist.

3-14. $D: (-\infty, 2) \cup (2, \infty)$; $R: (-\infty, -2.5] \cup (-2, \infty)$

3-15. See below:

a. $9x^8$

b. $13x^{12}$

c. 2

d. 0

3-16. See below:

a. Stevie is traveling backwards.

b. 67.5 ft

c. 45 ft

d. 10 ft/min^2

e. Between 3 and 4 minutes.

3-17. See below:

a. $f(x) = \begin{cases} \log(-x) & \text{for } x < 0 \\ \log(x) & \text{for } x > 0 \end{cases}$

b. $\{x: x \neq 0\}$

3-18. See below:

a. 3

b. $\frac{1}{2\sqrt{5}}$

c. DNE, but $y \to -\infty$

d. $\frac{2}{3}$