

Unit 7 Review Answers

$$\textcircled{1} \lim_{h \rightarrow 0} \frac{f(x+h) - f(x)}{h}$$

$$\textcircled{2} 2x - 3$$

$$\textcircled{3} 15x^2 + 4x + 1$$

$$\textcircled{4} 6x^5 - 5x^4 + 4x^3 + 3x^2$$

$$\textcircled{5} \frac{-4}{x^5} - \frac{6}{x^4}$$

$$\textcircled{6} \frac{-6}{x^9}$$

$$\textcircled{7} \frac{1}{4x^{3/4}}$$

$$\textcircled{8} \frac{7-4}{x^2} \text{ or } \frac{7x^2-4}{x^2}$$

$$\textcircled{9} \frac{24x}{(x^2+4)^2}$$

$$\textcircled{10} \frac{-1}{(x-2)^2}$$

$$\textcircled{11} 15x^2 + 34x + 11$$

$$\textcircled{12} 40x(x^2-3)^4$$

$$\textcircled{13} \frac{-30}{(5x+2)^3}$$

$$\textcircled{14} y = -2x$$

$$\textcircled{15} \text{A) } 4 \text{ ft/sec}$$

$$\text{B) } 2 \text{ ft/sec}$$

$$\textcircled{16} \text{A) } -2 \text{ ft/sec}$$

$$\text{B) } -34 \text{ ft/sec}$$

$$\text{C) } 0.9 \text{ sec}$$

$$\text{D) } 2.29 \text{ sec}$$

$$\text{E) } -43.3 \text{ ft/sec.}$$