

## #2 Sec. 2.3

p. 80 # 5, 9, 11, 13, 15, 19, 21, 25, 28, 35

$$\textcircled{5} \lim_{t \rightarrow 2} t^{-1} = \frac{1}{2}$$

$$\textcircled{9} \lim_{x \rightarrow -1} 3x^4 - 2x^3 + 4x = 1$$

$$\textcircled{11} \lim_{x \rightarrow 2} (x+1)(3x^2-9) = 9$$

$$\textcircled{13} \lim_{t \rightarrow 4} \frac{3t-14}{t+1} = \frac{-2}{5}$$

$$\textcircled{15} \lim_{y \rightarrow \frac{1}{4}} (16y+1)(2y^{\frac{1}{2}}+1) = 10$$

$$\textcircled{19} \lim_{x \rightarrow -1} \frac{x}{x^3+4x} = \frac{1}{5}$$

$$\textcircled{21} \lim_{t \rightarrow 25} \frac{3\sqrt{t} - \frac{1}{5}t}{(t-20)^2} = \frac{10}{25} = \frac{2}{5}$$

$$\textcircled{25} \lim_{x \rightarrow c} \frac{1}{f(x)} = \frac{\lim_{x \rightarrow c} 1}{\lim_{x \rightarrow c} f(x)} = \frac{1}{\lim_{x \rightarrow c} f(x)}$$

$$\textcircled{28} \lim_{x \rightarrow -4} 2f(x) + 3g(x) = 2(3) + 3(1) = 9$$

$$\textcircled{35} \lim_{t \rightarrow 3} t g(t) = 12 \quad \lim_{t \rightarrow 3} t \cdot \lim_{t \rightarrow 3} g(t) = 12$$

$$3 \cdot \lim_{t \rightarrow 3} g(t) = 12$$

$$\lim_{t \rightarrow 3} g(t) = 4$$