

3.1

$$1) \lim_{x \rightarrow 2} 5x = 5 \cdot 2 = 10$$

$$2) \lim_{x \rightarrow 2} 2x + 3 = 2 \cdot 2 + 3 = 7$$

$$3) \lim_{x \rightarrow 2} x^2 - 4x + 1 = 2^2 - 4 \cdot 2 + 1 = -3$$

$$4) \lim_{x \rightarrow -4} \sqrt{25 - x^2} = \sqrt{25 - (-4)^2} = 3$$

$$5) \lim_{x \rightarrow 1} \frac{x^2 - 4}{x^2 + 4} = \frac{1^2 - 4}{1^2 + 4} = -\frac{3}{5}$$

$$6) \lim_{x \rightarrow 3} \frac{x - 2}{x + 2} = \frac{3 - 2}{3 + 2} = \frac{1}{5}$$