Delve AP Calculus Homework Week 2

(1)
$$\lim_{x \to 4/3} x^3$$

(2)
$$\lim_{x \to 4^-} (4 - x)$$

(3)
$$\lim_{x \to y} xy$$

(4)
$$\lim_{c \to \pi} \sqrt{3}$$

(5)
$$\lim_{x \to 2} |x^2 - 4|$$

(6)
$$\lim_{x \to 3\pi/2} \tan x$$

(7)
$$\lim_{x \to 4} \frac{x^2 - 9x + 20}{x^2 - 11x + 28}$$

(8)
$$\lim_{x \to 6} \frac{x^2 - 9x + 20}{x^2 - 11x + 28}$$

(9)
$$\lim_{x \to \infty} \frac{x^2 - 9x + 20}{x^2 - 11x + 28}$$

(10)
$$\lim_{x \to -\infty} \frac{x^2 - 9x + 20}{x^2 - 11x + 28}$$

(11)
$$\lim_{x \to \infty} \sin x$$

(12)
$$\lim_{x \to 0^+} \ln x$$

(13)
$$\lim_{x \to 4} \frac{\sqrt{x} + 2}{x - 4}$$

(14)

$$\lim_{x \to 4} \frac{\sqrt{x} - 2}{x - 4}$$

(15)

$$\lim_{n \to 0} \frac{\frac{1}{x+n} - \frac{1}{n}}{n}$$

(16) Because $f(x) = \frac{x^2 - 8x + 15}{x - 5}$ is not _____ at $x =$ ___, we cannot evaluate $\lim_{x \to 5} f(x)$ by usual substitution. *(Fill in the blank.)*