

Ch. 1.2-1.3 Limits Quiz Review Worksheet

1) Find the values

a. $\lim_{x \rightarrow -7} g(x) =$

b. $g(-7) =$

c. $\lim_{x \rightarrow -4} g(x) =$

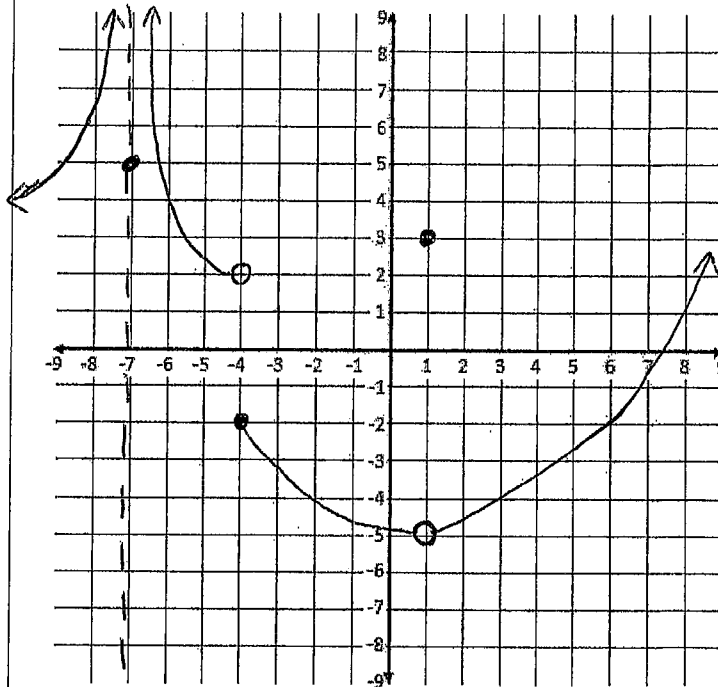
d. $g(-4) =$

e. $\lim_{x \rightarrow 1} g(x) =$

f. $g(1) =$

g. $g(6) =$

h. $\lim_{x \rightarrow 6} g(x) =$



2) Sketch a graph with the following characteristics:

a) $\lim_{x \rightarrow -5} f(x) = -3$

b) $g(-5) = \text{undefined}$

c) $g(-2) = -1$

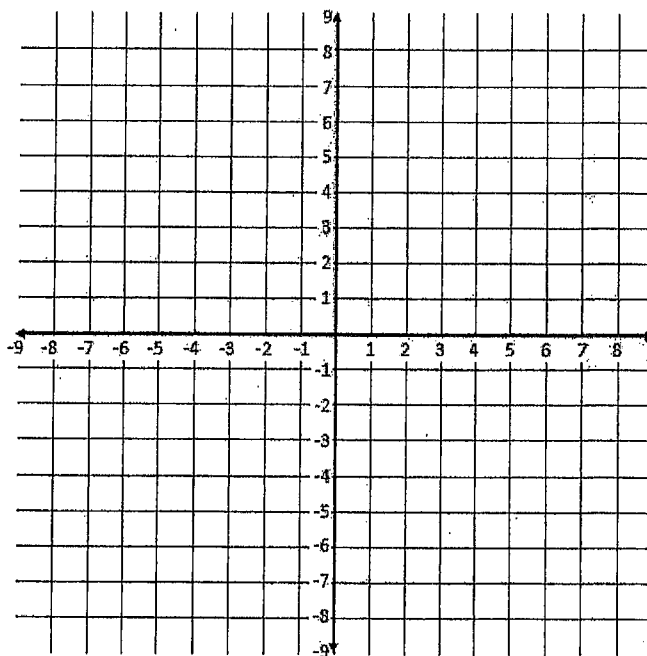
d) $\lim_{x \rightarrow 2} f(x) = -\infty$

e) $g(2) = 3$

f) $\lim_{x \rightarrow 2} f(x) = 3$

g) $g(6) = 7$

h) $\lim_{x \rightarrow 6} f(x)$ does not exist



Evaluate the Limit:

3)

$$\lim_{x \rightarrow 0} \frac{\frac{1}{x+5} - \frac{1}{5}}{x}$$

4)

$$\lim_{x \rightarrow 1} \frac{x^2 - x - 2}{x - 1}$$

5)

$$\lim_{x \rightarrow 2} \frac{4 - \sqrt{18 - x}}{x - 2}$$

6)

$$\lim_{x \rightarrow 1} \frac{3x^2 - x - 2}{x - 2}$$

7)

$$\lim_{x \rightarrow 5} \frac{4x^2 - 22x + 10}{x - 5}$$

8)

$$\lim_{x \rightarrow 0} \frac{\sqrt{3+x} - \sqrt{3}}{x}$$

9)

$$\lim_{x \rightarrow 0} \frac{\frac{1}{4-x} - \frac{1}{4}}{x}$$

10)

$$\lim_{x \rightarrow 1} \frac{\frac{3}{x} - 3}{x - 1}$$