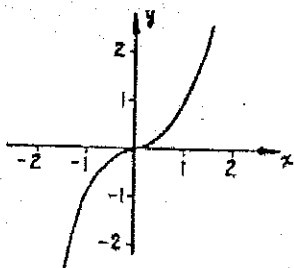


Homework for Visual Limits

For the function f graphed to the right, find

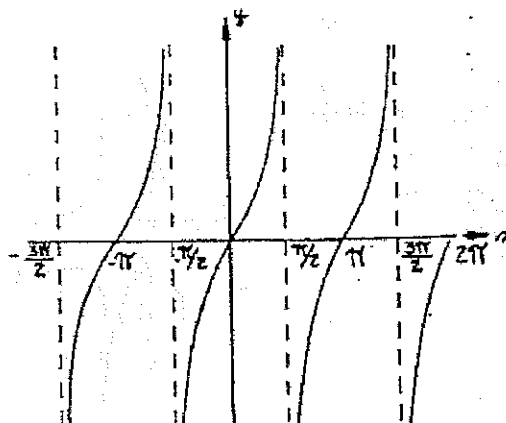
- (a) $\lim_{x \rightarrow 1^-} f(x) = 1$
- (b) $\lim_{x \rightarrow 1^+} f(x) = 1$
- (c) $\lim_{x \rightarrow 1} f(x) = 1$
- (d) $f(1) = 1$
- (e) $\lim_{x \rightarrow +\infty} f(x) = +\infty$
- (f) $\lim_{x \rightarrow -\infty} f(x) = -\infty$



For the function ϕ graphed to the right, find

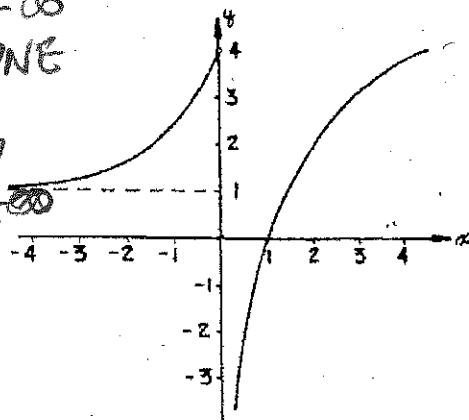
- (a) $\lim_{x \rightarrow \pi/2^-} \phi(x) = +\infty$
- (b) $\lim_{x \rightarrow \pi/2^+} \phi(x) = -\infty$
- (c) $\lim_{x \rightarrow \pi/2} \phi(x) = \text{DNE}$
- (d) $\phi(\pi/2) = \text{DNE}$
- (e) Can you identify this function?

$y = \tan x$



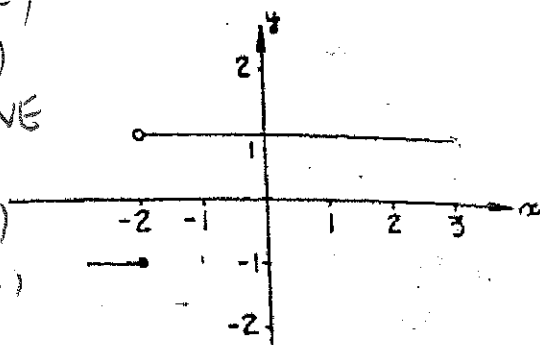
For the function f graphed to the right, find

- (a) $\lim_{x \rightarrow 0^-} f(x) = 4$
- (b) $\lim_{x \rightarrow 0^+} f(x) = -\infty$
- (c) $\lim_{x \rightarrow 0} f(x) = \text{DNE}$
- (d) $f(0) = 4$
- (e) $\lim_{x \rightarrow -\infty} f(x) = 1$
- (f) $\lim_{x \rightarrow +\infty} f(x) = +\infty$



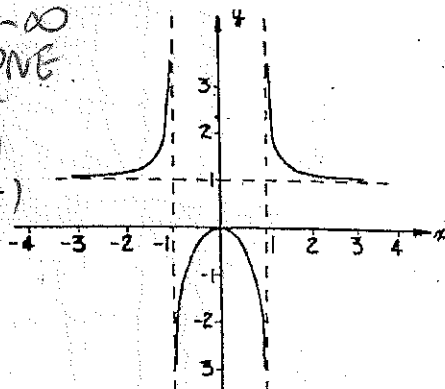
For the function g graphed to the right, find

- (a) $\lim_{x \rightarrow -2^-} g(x) = -1$
- (b) $\lim_{x \rightarrow -2^+} g(x) = 1$
- (c) $\lim_{x \rightarrow -2} g(x) = \text{DNE}$
- (d) $g(-2) = -1$
- (e) $\lim_{x \rightarrow +\infty} g(x) = 1$
- (f) $\lim_{x \rightarrow -\infty} g(x) = -1$



For the function f graphed to the right, find

- (a) $\lim_{x \rightarrow -1^-} f(x) = +\infty$
- (b) $\lim_{x \rightarrow -1^+} f(x) = -\infty$
- (c) $\lim_{x \rightarrow -1} f(x) = \text{DNE}$
- (d) $f(-1) = \text{DNE}$
- (e) $\lim_{x \rightarrow +\infty} f(x) = 1$
- (f) $\lim_{x \rightarrow -\infty} f(x) = 1$



For the function h graphed to the right, find

- (a) $h(-3) = 1$
- (b) $h(2) = 3$
- (c) $\lim_{x \rightarrow -1^-} h(x) = -1$
- (d) $\lim_{x \rightarrow -1^+} h(x) = 1$
- (e) $\lim_{x \rightarrow -1} h(x) = \text{DNE}$
- (f) $f(-1) = 1$

