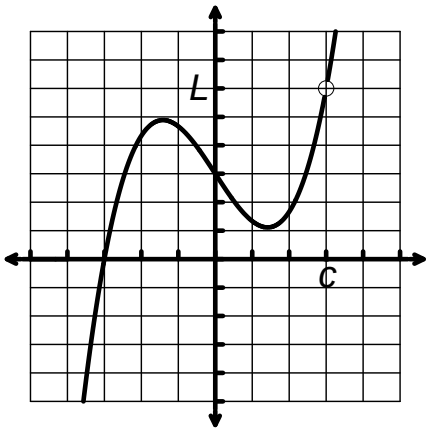
Limits

p. 98-105 (2.2) # 3

Verbally If $f(x)$ becomes arbitrarily close to a single number L as x approaches c from either side, then the limit of $f(x)$ as x approaches c is L .

Graphically



Analytically

$$\lim_{x \to c} f(x) = L$$

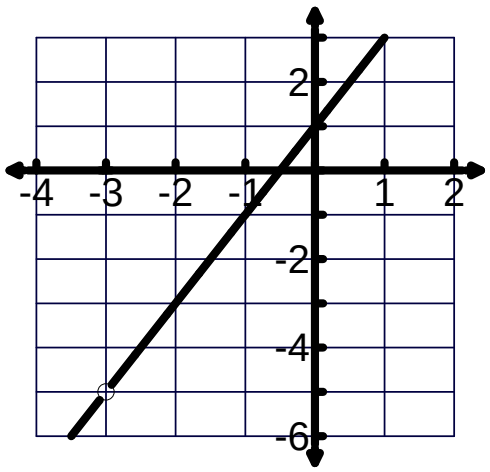
Numerically

x	-7.01	-7.001	-7	-6.999	-6.99
f(x)	2.594	2.597	2.599	2.598	2.596

x	2.999	2.99	3	3.01	3.001
g(x)	8.93	9.988	ERROR	9.991	9.957

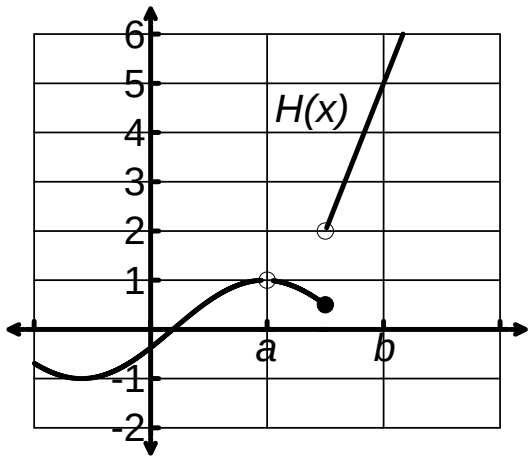
---

1. Use the graph below to find the limit (if it exists) for



$$\lim_{x \to -3} \frac{2x^2 + 7x + 3}{x + 3}.$$

**2. Use the graph below to find the following limits.



a) $\lim_{x \to a} H(x)$ b) $\lim_{x \to b} H(x)$