



Evaluate limits from tables

1

Use the table to find the value $f(x)$ approaches as x approaches -1 from the left.

x	-1.1	-1.01	-1.001	-1	-0.999	-0.99	-0.9
$f(x)$	-1.1	-1.01	-1.001	-1	-1.002	-1.02	-1.2

A

$$\lim_{x \rightarrow -1^-} f(x) = 0$$

B

$$\lim_{x \rightarrow -1^-} f(x) = -2$$

C

$$\lim_{x \rightarrow -1^-} f(x) = -1$$

D

$$\lim_{x \rightarrow -1^-} f(x) = 1$$

2

Use the table to evaluate the one-sided limit as x approaches -2 from the left.

x	-2.1	-2.01	-2.001	-2	-1.999	-1.99	-1.9
$f(x)$	-1.8	-1.98	-1.998	-2	-2.001	-2.01	-2.1

A

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

B

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

C

$$\lim_{x \rightarrow -2^-} f(x) = -1$$

D

$$\lim_{x \rightarrow -2^-} f(x) = 0$$

3

Use the table to evaluate $\lim_{x \rightarrow -1} f(x)$ (the two-sided limit).

x	-1.1	-1.01	-1.001	-1	-0.999	-0.99	-0.9
$f(x)$	-2.8	-2.98	-2.998	-3	-2.999	-2.99	-2.9

A

$$\lim_{x \rightarrow -1} f(x) = -3$$

B

$$\lim_{x \rightarrow -1} f(x) = -2$$

C

$$\lim_{x \rightarrow -1} f(x) = -1$$

D

$$\lim_{x \rightarrow -1} f(x) = -4$$

4

Use the table to find the value $f(x)$ approaches as x gets closer to 2.

x	1.9	1.99	1.999	2	2.001	2.01	2.1
$f(x)$	-0.8	-0.98	-0.998	undefined	-1.002	-1.02	-1.2

A

$$\lim_{x \rightarrow 2} f(x) = 1$$

B

$$\lim_{x \rightarrow 2} f(x) = 0$$

C

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

D

$$\lim_{x \rightarrow 2} f(x) = -1$$



Evaluate limits from tables

5Use the table to evaluate $\lim_{x \rightarrow 1} f(x)$.

x	0.9	0.99	0.999	1	1.001	1.01	1.1
f(x)	1.9	1.99	1.999	4	2.001	2.01	2.1

A

$$\lim_{x \rightarrow 1} f(x) = 2$$

B

$$\lim_{x \rightarrow 1} f(x) = 1$$

C

$$\lim_{x \rightarrow 1} f(x) = 3$$

D

$$\lim_{x \rightarrow 1} f(x) = 4$$

6Use the table to evaluate $\lim_{x \rightarrow 1} f(x)$.

x	0.9	0.99	0.999	1	1.001	1.01	1.1
f(x)	1.9	1.99	1.999	undefined	2.001	2.01	2.1

A

$$\lim_{x \rightarrow 1} f(x) = 2$$

B

$$\lim_{x \rightarrow 1} f(x) = 3$$

C

$$\lim_{x \rightarrow 1} f(x) = 1$$

D

$$\lim_{x \rightarrow 1} f(x) = 4$$

7Use the table to find the value $f(x)$ approaches as x approaches -1, and the value of $f(-1)$.

x	-1.1	-1.01	-1.001	-1	-0.999	-0.99	-0.9
f(x)	0.9	0.99	0.999	2	1.001	1.01	1.1

A

$$\lim_{x \rightarrow -1} f(x) = 1, f(-1) = 1$$

B

$$\lim_{x \rightarrow -1} f(x) = 1, f(-1) = 2$$

C

$$\lim_{x \rightarrow -1} f(x) = 2, f(-1) = 1$$

D

$$\lim_{x \rightarrow -1} f(x) = 2, f(-1) = 2$$



Evaluate limits from tables

8

Use the table to find the value $f(x)$ approaches as x gets closer to 1.

x	0.9	0.99	0.999	1	1.001	1.01	1.1
f(x)	2.2	2.02	2.002	3	1.998	1.98	1.8

A

$$\lim_{x \rightarrow 1} f(x) = 3$$

B

$$\lim_{x \rightarrow 1} f(x) = 4$$

C

$$\lim_{x \rightarrow 1} f(x) = 1$$

D

$$\lim_{x \rightarrow 1} f(x) = 2$$

9

Use the table to find $\lim_{x \rightarrow 0} f(x)$ and the value $f(0)$.

x	-0.1	-0.01	-0.001	0	0.001	0.01	0.1
f(x)	1.8	1.98	1.998	0	2.002	2.02	2.2

A

$$\lim_{x \rightarrow 0} f(x) = 0, f(0) = 2$$

B

$$\lim_{x \rightarrow 0} f(x) = 2, f(0) = 2$$

C

$$\lim_{x \rightarrow 0} f(x) = 0, f(0) = 0$$

D

$$\lim_{x \rightarrow 0} f(x) = 2, f(0) = 0$$

10

Use the table to evaluate $\lim_{x \rightarrow -1} f(x)$ (the two-sided limit).

x	-1.1	-1.01	-1.001	-1	-0.999	-0.99	-0.9
f(x)	-1.1	-1.01	-1.001	-1	-1.001	-1.01	-1.1

A

$$\lim_{x \rightarrow -1} f(x) = 0$$

B

$$\lim_{x \rightarrow -1} f(x) = 1$$

C

$$\lim_{x \rightarrow -1} f(x) = -2$$

D

$$\lim_{x \rightarrow -1} f(x) = -1$$

11

Use the table to find the value $f(x)$ approaches as x gets closer to 1.

x	0.9	0.99	0.999	1	1.001	1.01	1.1
f(x)	1.1	1.01	1.001	undefined	0.999	0.99	0.9

A

$$\lim_{x \rightarrow 1} f(x) = 2$$

B

$$\lim_{x \rightarrow 1} f(x) = 3$$

C

$$\lim_{x \rightarrow 1} f(x) = 1$$

D

$$\lim_{x \rightarrow 1} f(x) = 0$$