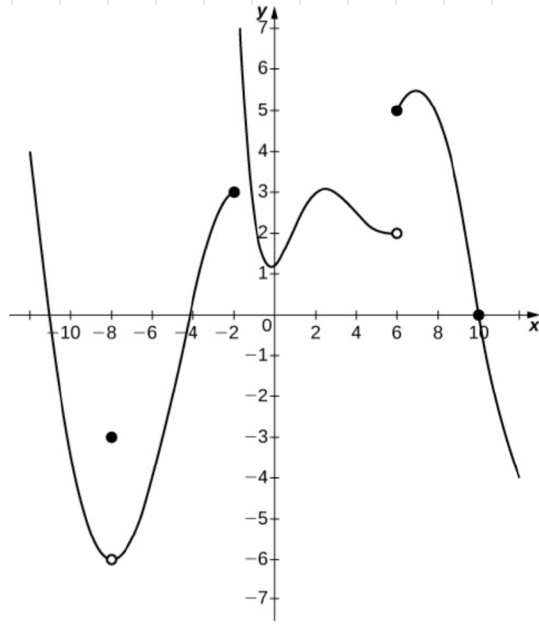


HOMEWORK



46. $\lim_{x \rightarrow 10} f(x) = 0$ b/c as x gets close to 10 from left and right, $f(x)$ gets close to 0.

So the given value is correct.

47. $\lim_{x \rightarrow -2^+} f(x) = \infty$ b/c as x gets close to -2 from the right, $f(x)$ grows without bound

So the given value of 3 is incorrect!

48. $\lim_{x \rightarrow -8} f(x) = -6$ b/c from left and right, as x gets arbitrarily close to -8, $f(x)$ gets close to -6.

But $f(-8) = -3$ (closed dot indicates function value), so the stated equality is incorrect!

49. $\lim_{x \rightarrow 6} f(x)$ DNE b/c from the left: $\lim_{x \rightarrow 6^-} f(x) = 2$
but from the right: $\lim_{x \rightarrow 6^+} f(x) = 5$

As $2 \neq 5$, $\lim_{x \rightarrow 6} f(x)$ DNE.