

Piecewise function

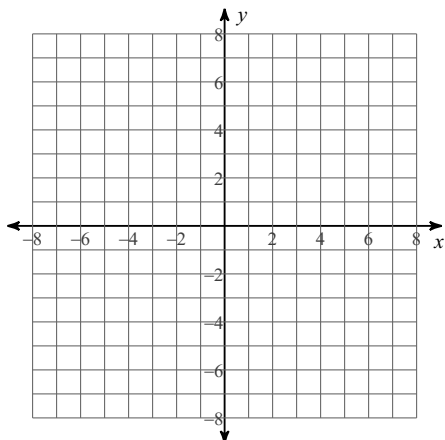
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Name _____

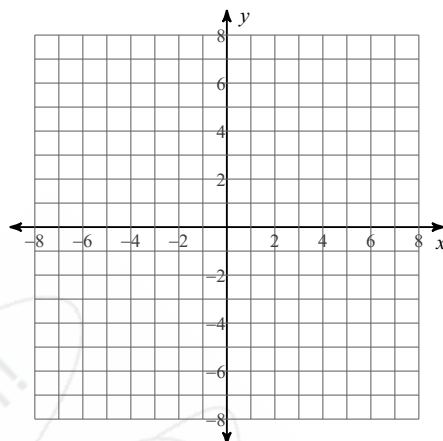
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Sketch the graph of each function.

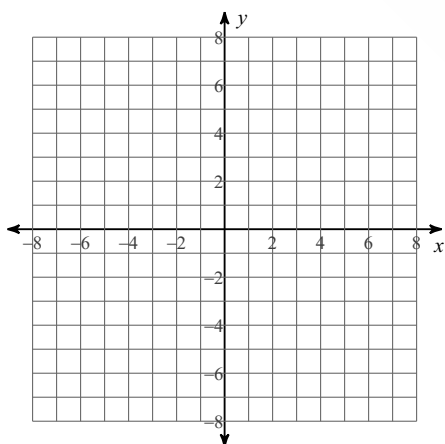
$$1) h(x) = \begin{cases} (x+2)^3, & x < -1 \\ -3^x, & x \geq -1 \end{cases}$$



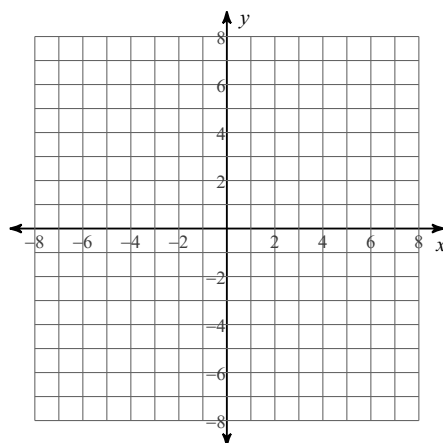
$$2) w(x) = \begin{cases} (x+5)^3, & x \leq -4 \\ -2, & -4 < x < 2 \\ -x-2, & x \geq 2 \end{cases}$$



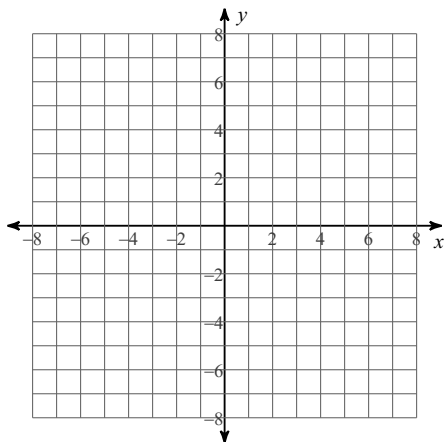
$$3) f(x) = \begin{cases} |x-2|, & x \leq -2 \\ x-2, & x > -2 \end{cases}$$



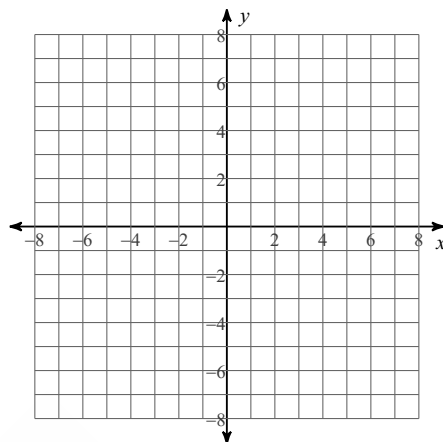
$$4) g(x) = \begin{cases} -3, & x \leq -2 \\ |x-2|, & -2 < x < 2 \\ -|x|, & x \geq 2 \end{cases}$$



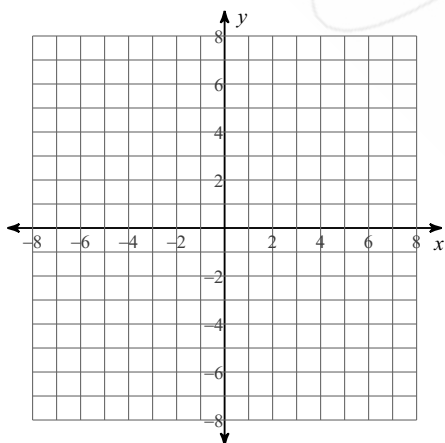
$$5) f(x) = \begin{cases} \sqrt{x+1}, & x \leq 0 \\ 2^x, & x > 0 \end{cases}$$



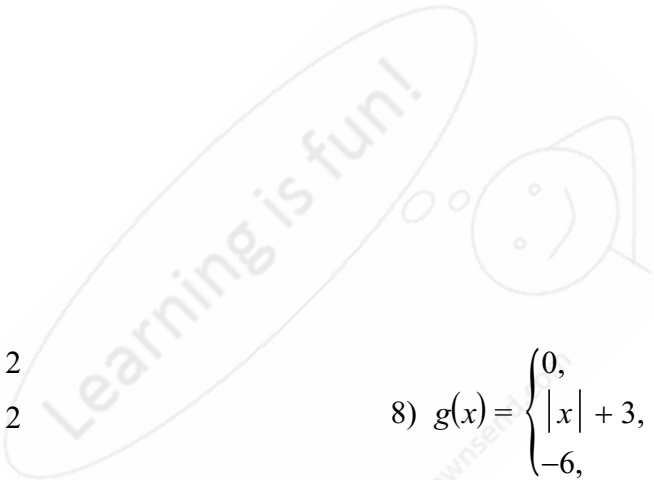
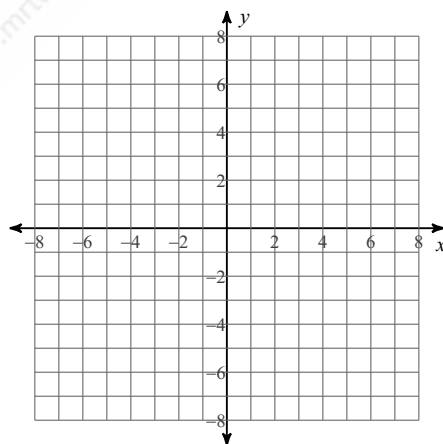
$$6) w(x) = \begin{cases} -\frac{2}{x}, & x < 0 \\ (x-1)^3, & x \geq 0 \end{cases}$$



$$7) f(x) = \begin{cases} -x-2, & x < 2 \\ (x-3)^3, & x \geq 2 \end{cases}$$



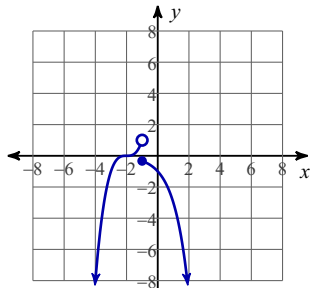
$$8) g(x) = \begin{cases} 0, & x \leq -3 \\ |x| + 3, & -3 < x < 2 \\ -6, & x \geq 2 \end{cases}$$



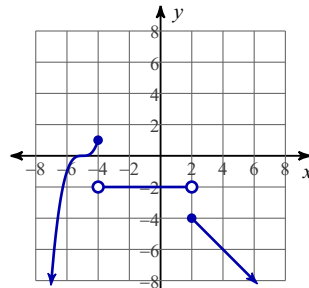
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Answers to Piecewise function

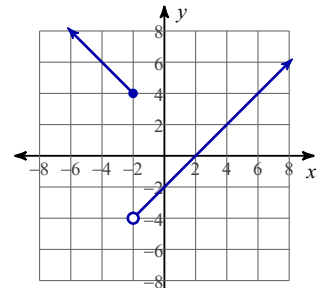
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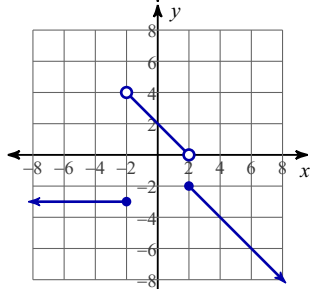
2)



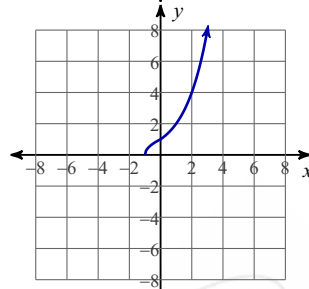
3)



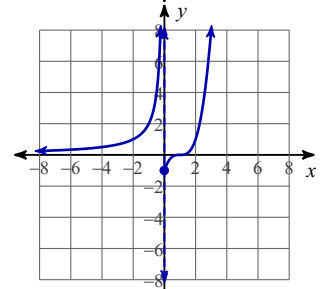
4)



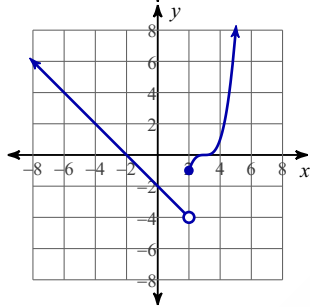
5)



6)



7)



8)

