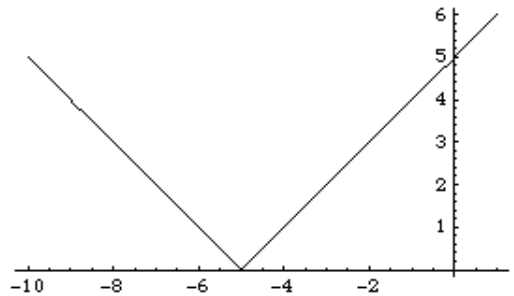


Write each function as a piecewise function and simplify, as in the sample. Graph the function. If possible, check your graph by verifying that it is the correct transformation (shift, reflection, etc.) of the function $f(x) = |x|$.

Please note that there are problems on the back.

SAMPLE. $f(x) = |x + 5|$.

$$\begin{aligned} f(x) = |x + 5| &= \begin{cases} x + 5 & x + 5 \geq 0 \\ -(x + 5) & x + 5 < 0 \end{cases} \\ &= \begin{cases} x + 5 & x \geq -5 \\ -x - 5 & x < -5 \end{cases} \end{aligned}$$



1. $f(x) = |x - 2|$

2. $f(x) = |x| + 3$

over for more fun!

3. $f(x) = |2x|$

4. $f(x) = |2 - 3x|$

5. $f(x) = |2x + 1| - 4$