

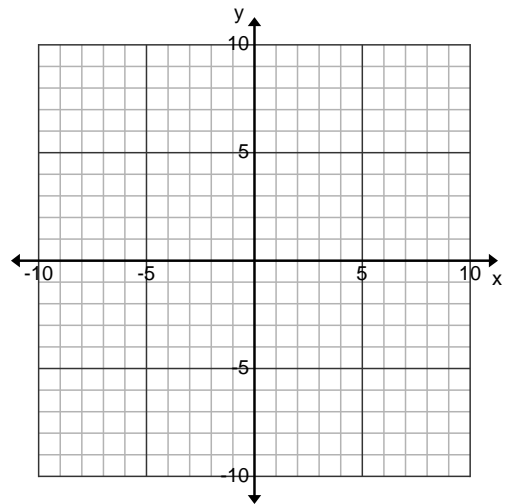
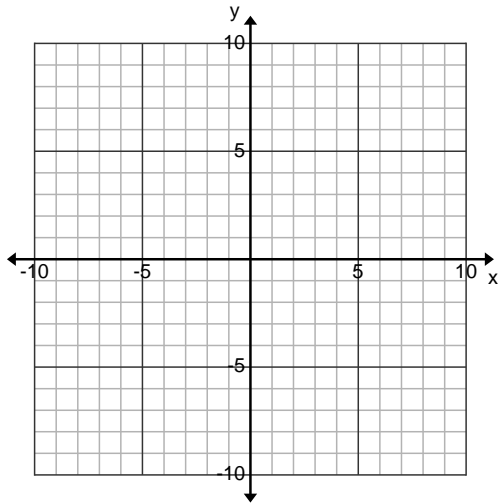


## PIECEWISE FUNCTIONS (RADICALS) WORKSHEET

Hints: Graph each portion separately. Use a T-table, if needed.

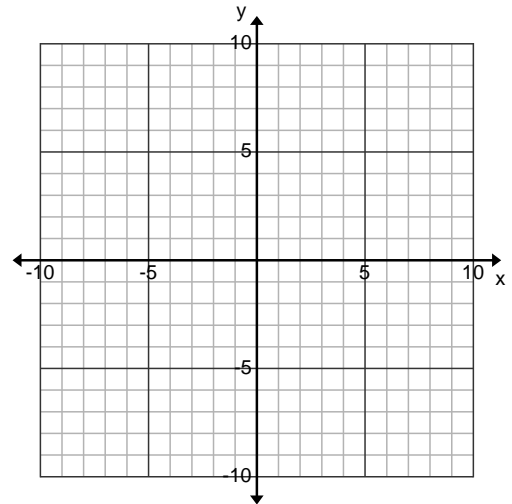
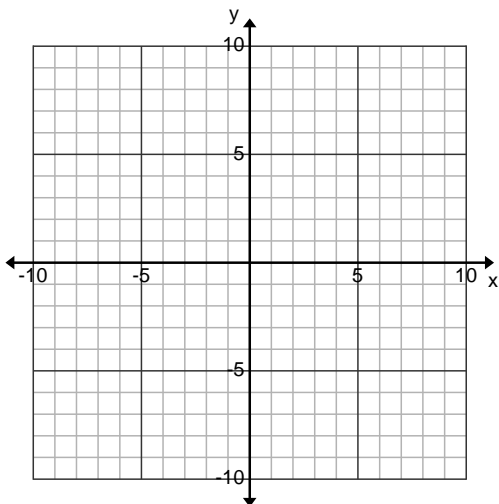
$$1) f(x) = \begin{cases} \sqrt{x} + 1 & x \geq 0 \\ -2x - 1 & x < 0 \end{cases}$$

$$2) f(x) = \begin{cases} -\sqrt{x} + 3 & x > 1 \\ 2x^2 - 2 & x \leq 1 \end{cases}$$



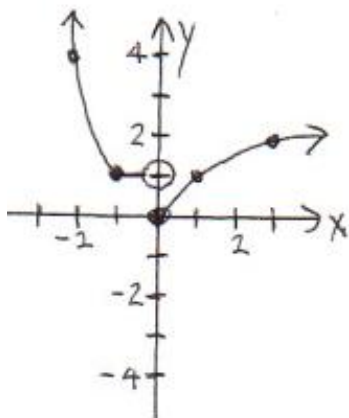
$$3) f(x) = \begin{cases} -x + 4 & x \leq -1 \\ 2 & -1 < x \leq 1 \\ \sqrt{x+2} & x > 1 \end{cases}$$

$$4) f(x) = \begin{cases} 3x + 5 & x \leq 0 \\ x & 0 < x < 3 \\ \sqrt{x-3} - 2 & x \geq 3 \end{cases}$$



Write equations for the piecewise functions whose graphs are shown below. Assume that the units are one for every tick mark.

5.



6.

