

Homework # 21

Check your email for a description of the homework. I described it orally in class and then emailed the description.

Transformations

$$f(x) = a|x-h|+k$$

$$f(x) = |x|+k$$

k

• the graph $|x|$ will have a vertical shift of k units

$+k \uparrow$ $\downarrow k$

rigid trans.

$$f(x) = |x - h|$$

h The graph $|x|$ will have
a horizontal shift of
h units

$$+h \rightarrow \quad -h \leftarrow$$

opposite of what you see

$$\begin{array}{l} y = |x - 2| \\ y = |x + 7| \end{array} \quad \begin{array}{l} h = 2 \\ h = -7 \end{array}$$