$h(x) = LOG_a(-x)$

$$= \frac{LOG(-x)}{LOG\ 9}$$

$i(x) = LOG_a(-x-1)$

$$= \frac{LOG(-x-1)}{LOG\ 9}$$

#11

$f(x) = LOG_4(x-3)$

$$= \frac{LOG(x-3)}{LOG\ 4}$$

$i(x) = LOG_a(-x-1)$

$= L\!\!\!\!\!\times\!\!\!\!\!\not{\,}$ $= LOG_a\left[-\underset{\underset{LEFT\ 1}{\uparrow}}{(x+1)}\right]$

$= \not{\,\times\times\times}$

REFLECT
ACROSS
y-AXIS
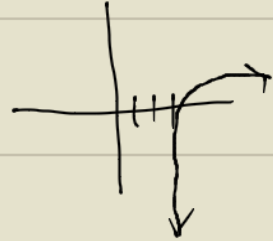
SPECIAL BASES

1. $LOG\ X$: $b=10$

   "Common LOG"

2. $LN\ X$: $b=e$

   "NATURAL LOG"

DOMAIN OF A LOG FUNCTION

SET WHAT FOLLOWS THE
LOG GREATER THAN
ZERO AND SOLVE

#14 $f(x) = LOG_3(x-5)$

$X-5 > 0$ $(5, \infty)$
$X > 5$

#15 $f(x) = LN(x+3)^2$

$(-2)^2 = 4$ $(x+3)^2 > 0$
$(2)^2 = 4$ $X \neq -3$

$(-\infty, -3) \cup (-3, \infty)$

#16

$LOG\ 10000$

$LOG_{10}\ 10^4$

4

#17

$LN\ \not{e^3}$

$LN_e\ e^{-3}$

-3

#18

$e^{LN_e\ 9X}$

$9X$

#19

$10^{LOG_{10}(5X-2)}$

$5X-2$