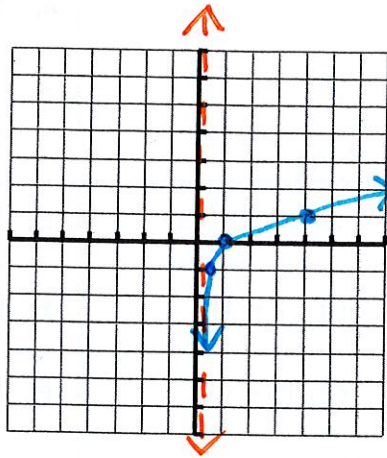


x	y
0.25	-1
1	0
4	1
16	2

$f(x) = \log_4 x$

Inverse  $\rightarrow x = \log_4 y$   
 $4^x = y$



Domain  $(0, \infty)$

Range  $(-\infty, \infty)$

Asymptote  $x = 0$

Equation of the inverse  $y = 4^x$

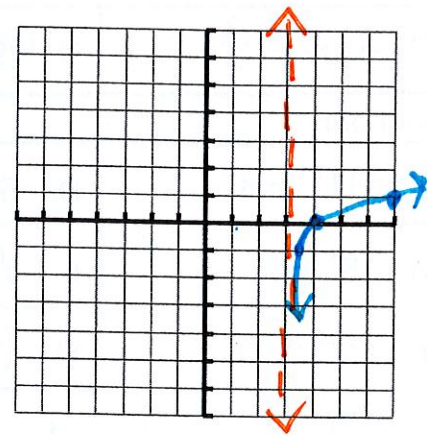
EB: L As  $x \rightarrow 0$ ,  $f(x) \rightarrow -\infty$   
 R As  $x \rightarrow \infty$ ,  $f(x) \rightarrow \infty$

x	y
-1	0.25
0	1
1	4
2	16

x	y
3.25	-1
4	0
7	1

$f(x) = \log_4(x - 3)$

Inverse  $\rightarrow x = \log_4(y - 3)$   
 $4^x = y - 3$   $y = 4^x + 3$



Domain  $(3, \infty)$

Range  $(-\infty, \infty)$

Asymptote  $x = 3$

Equation of the inverse  $y = 4^x + 3$

EB: As  $x \rightarrow +3$ ,  $f(x) \rightarrow -\infty$   
 As  $x \rightarrow \infty$ ,  $f(x) \rightarrow \infty$

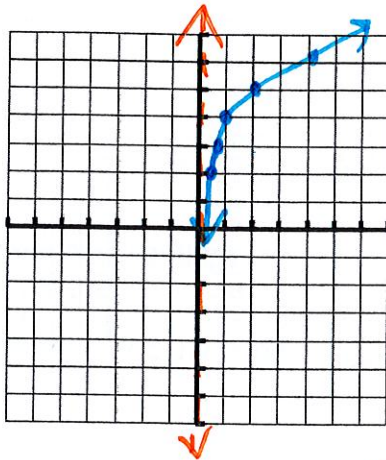
x	y
-1	3.25
0	4
1	7

$$f(x) = \log_2 x + 4$$

Inverse:  $x = \log_2 y + 4$   
 $x - 4 = \log_2 y$   
 $2^{x-4} = y$

x	y
1	0.125
2	0.25
3	0.5
4	1
5	2
6	4

x	y
0.25	2
0.5	3
1	4
2	5
4	6



Domain  $(0, \infty)$

Range  $(-\infty, \infty)$

Asymptote  $x = 0$

Equation of the inverse

$y = 2^{x-4}$

EB:  $\rightarrow$  As  $x \rightarrow 0, f(x) \rightarrow -\infty$   
 $R \rightarrow$  As  $x \rightarrow \infty, f(x) \rightarrow \infty$