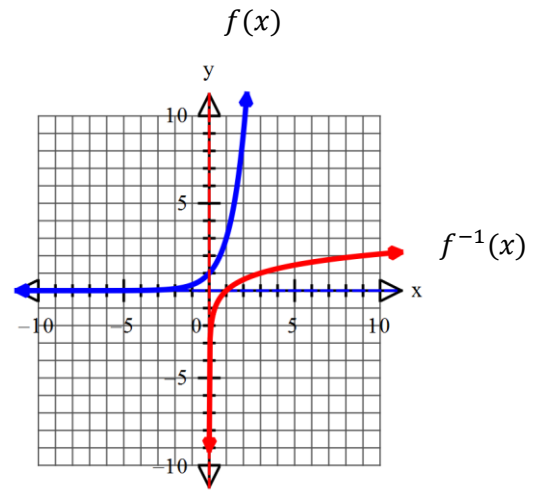


SM3H-- answers to 5.5

1.

x	$f(x)$	x	$f^{-1}(x)$
-2	$\frac{1}{9}$	$\frac{1}{9}$	-2
-1	$\frac{1}{3}$	$\frac{1}{3}$	-1
0	1	1	0
1	3	3	1
2	9	9	2



3. $f^{-1}(x) = 7 + 5^{x+4}$

5. $f^{-1}(x) = \ln(x + 3)$

7. $f^{-1}(x) = \frac{10^{x+1}}{2}$

9. $f^{-1}(x) = 2 - \ln(3x - 12)$

11. $f^{-1}(x) = \frac{1}{2} - \frac{\log_3\left(\frac{x-5}{2}\right)}{2}$

13. $x \approx 1.0986$

15. $x \approx 1.2619$

17. $x \approx 0.6131$

19. a) Domain: $(-4, \infty)$

b) VA: $x = -4$

d) Range: $(-\infty, \infty)$,

e) $f^{-1}(x) = e^x - 4$

e) Domain: $(-\infty, \infty)$,

Range: $(-4, \infty)$ H.A.: $y = -4$

