

SM3H 5.2 odd answers

1. $(0, \infty)$
3. 1
5. true
7. $\log_a 1.6 = 2$
9. $\ln M = 2.2$
11. $a^6 = 3$
13. $e^4 = x$
15. $x = -4$
17. $x = \frac{1}{2}$
19. $(10, \infty)$
21. $(0, 1) \cup (1, \infty)$
23. no solution
25. no solution

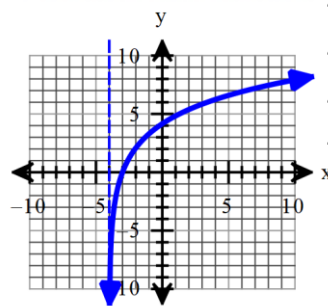
29. Domain: $(-4, \infty)$

VA: $x = -4$,

Vertical stretch by a factor a 3, translate left 4

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

$x - 4$	$3y$
$\frac{1}{e} - 4$	-3
-3	0
$e - 4$	3

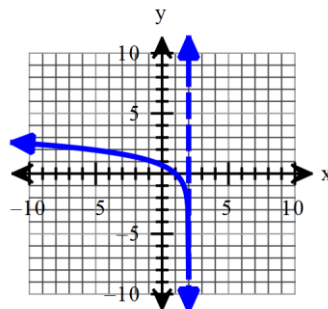


31. Domain: $(-\infty, 2)$

VA: $x = 2$, reflect over y-axis, translate right 2

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

$-x + 2$	y
$-\frac{1}{e} + 2$	-1
1	0
$-e + 2$	1

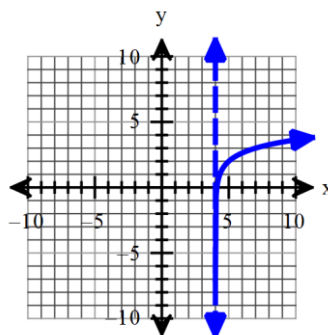


33. Domain: $(4, \infty)$, VA: $x = 4$

translate right 4, up 2

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

$x + 4$	$y + 2$
$4\frac{1}{3}$	1
5	2
7	3

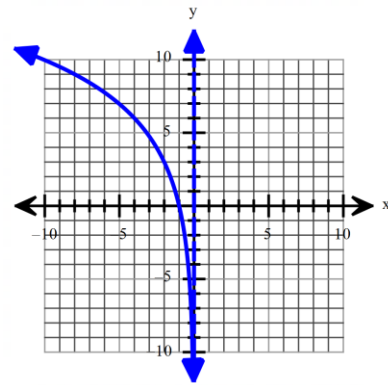


35. Domain: $(-\infty, 0)$, VA: $x = 0$

Reflect over y-axis, vertical stretch by a factor of 3

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

$-x$	$3y$
$-\frac{1}{2}$	-3
-1	0
-2	3



37. $x = 5$

39. $x = 2$

41. $x = -1$

43. $x = -1 + \ln \frac{5}{4}$

45a. 25 dB

45b. rifle is 134 dB so wear ear protection