$$y = \sqrt{3x + 4}.$$

$3x + 4 \geq 0$

$3x \geq -4$

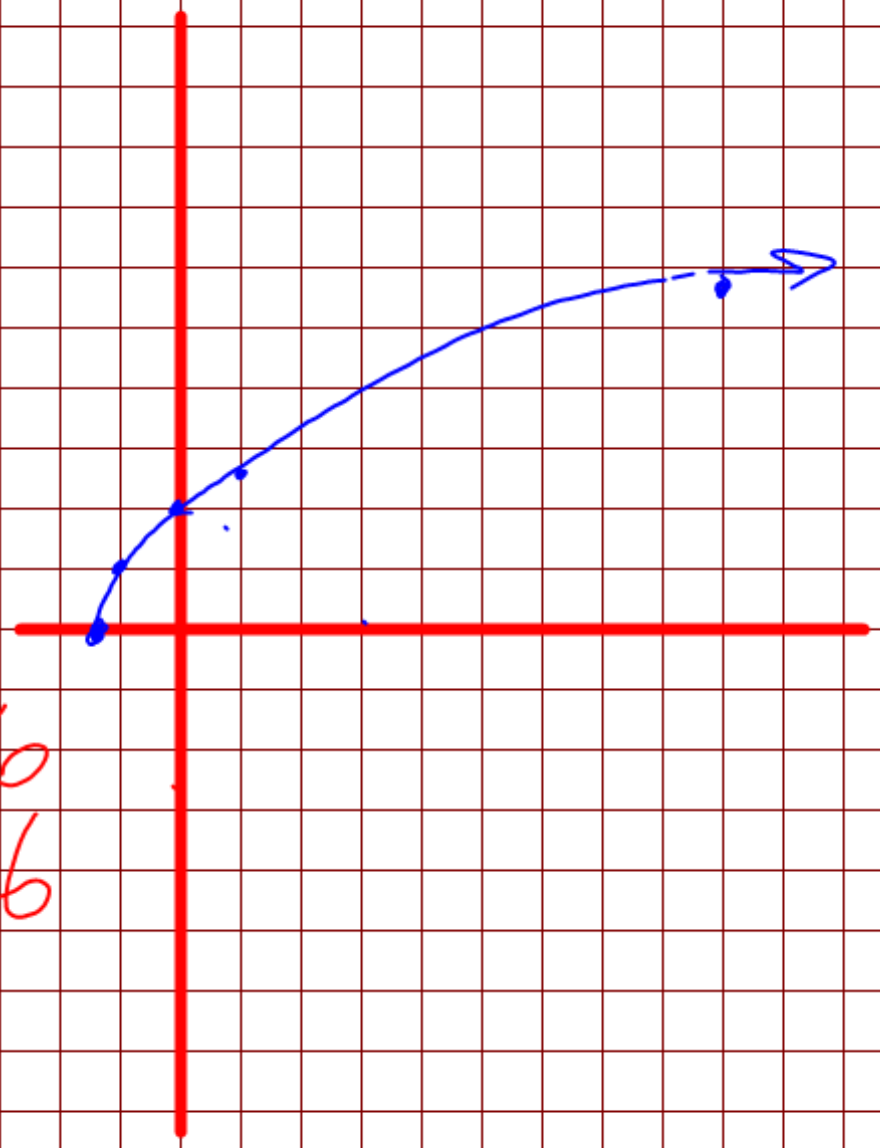
Domain $x \geq -\frac{4}{3}$

Range $y \geq 0$

x-int: 2

x-int: $-\frac{4}{3}$

x	y
$-\frac{4}{3}$	0
-1	1
0	2
1	≈ 2.6
9	≈ 5.6



$y = -\sqrt{3x+6} - 4$

$3x + 6 \geq 0$

$3x \geq -6$

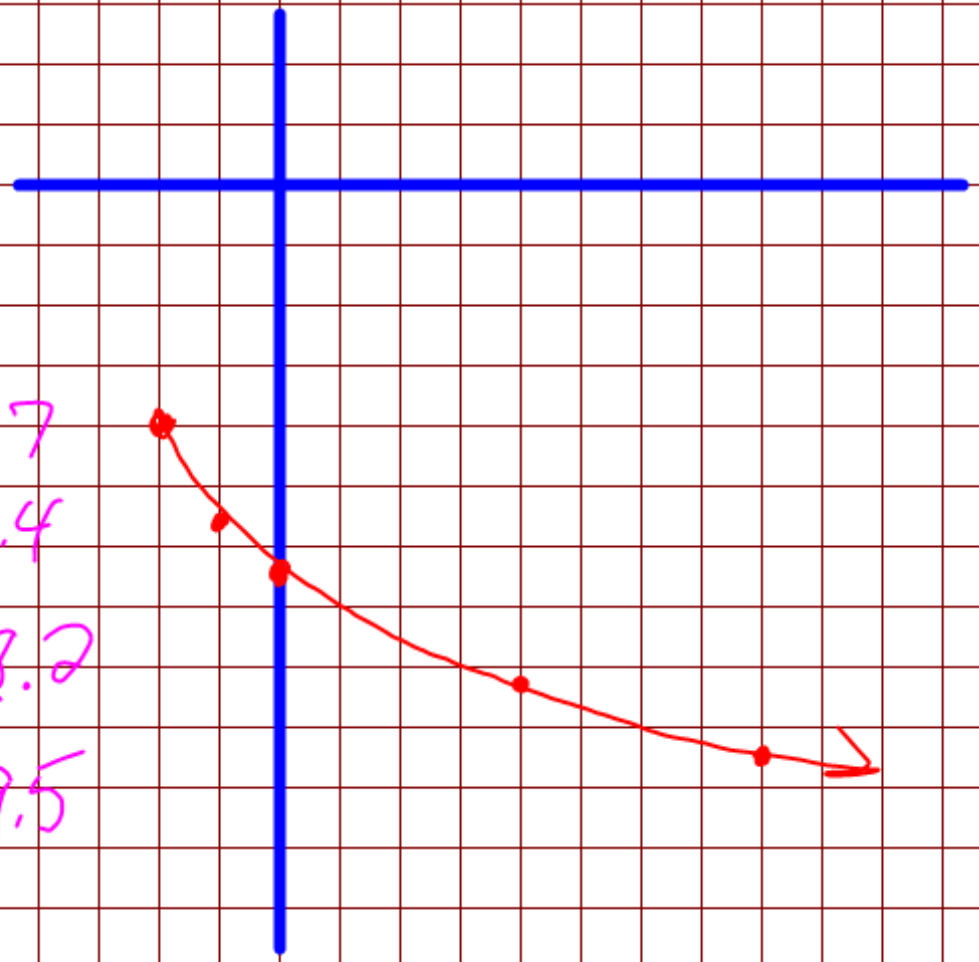
Domain: $x \geq -2$

Range: $y \leq -4$

y-int: ≈ -6.4

x-int: none

x	y
-2	-4
-1	≈ -5.7
0	≈ -6.4
4	≈ -8.2
8	≈ -9.5



$$d = \sqrt{\frac{3h}{2}}.$$

$$(3)^2 = \left(\sqrt{\frac{3h}{2}}\right)^2$$

$$\left(\frac{2}{3}\right)9 = \frac{3h}{2}\left(\frac{2}{3}\right)$$

$$6\text{ft} = h$$

$$y < \sqrt{2x - 6}.$$

$2x - 6 \geq 0$

$2x \geq 6$

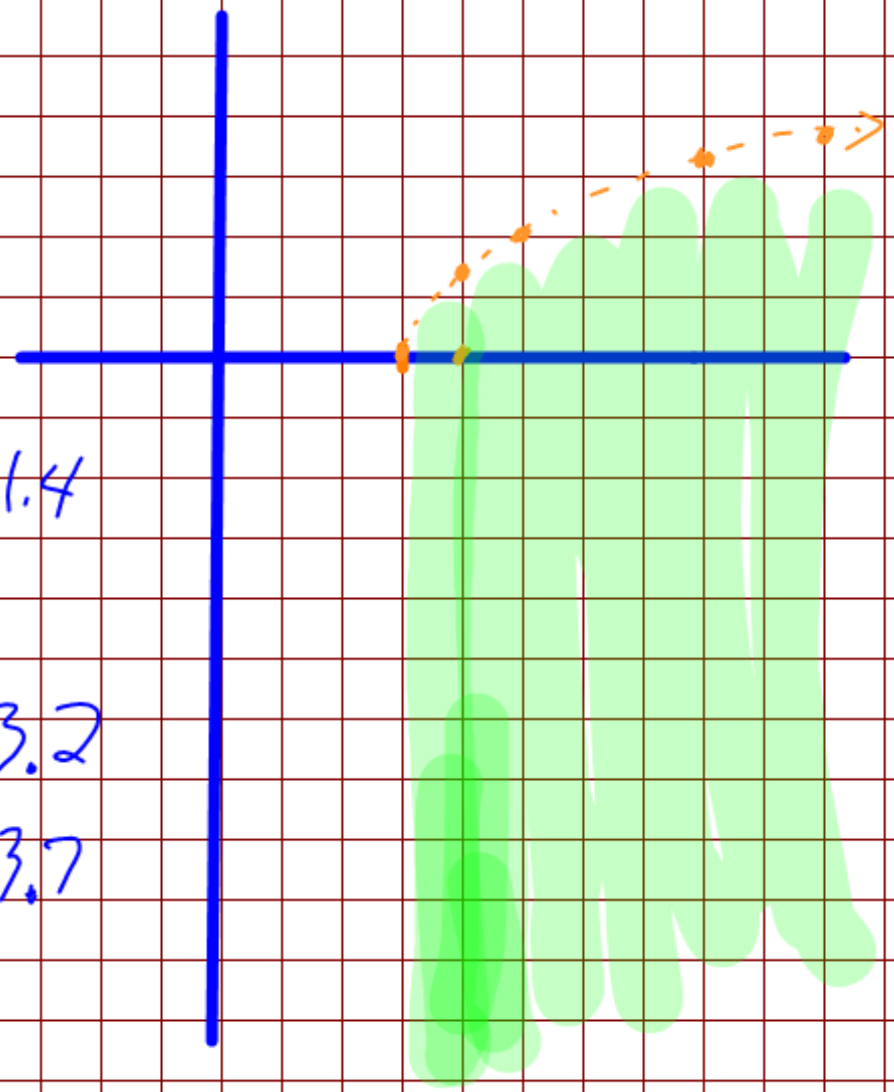
$x \geq 3$

x	y
3	0
4	$\sqrt{2} \approx 1.4$
5	2
8	$\sqrt{10} \approx 3.2$
10	$\sqrt{14} \approx 3.7$

$(4, 0)$

$0 < \sqrt{2(4) - 6}$

$0 < \sqrt{2}$



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9-10, 14-16 (pick 2), 18-20 (pick 2), 22, 25-27, 30, 34-35, 43-47			