

16. $y = \sqrt{5x - 3}$

$$5x - 3 \geq 0$$

$$5x \geq 3$$

Domain $x \geq \frac{3}{5}$

Range $y \geq 0$

$$\begin{array}{|c|c|} \hline x & y \\ \hline \end{array}$$

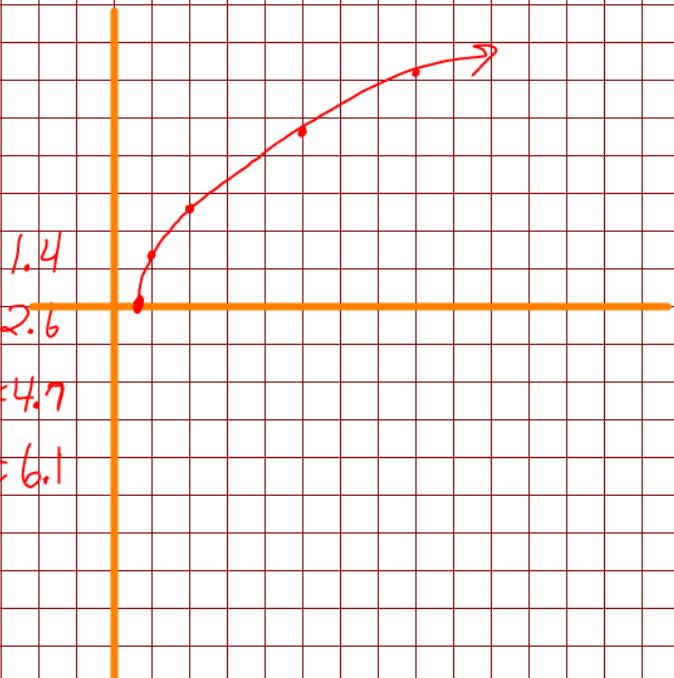
$$\frac{3}{5} \quad 0$$

$$1 \quad \sqrt{2} \approx 1.4$$

$$2 \quad \sqrt{7} \approx 2.6$$

$$5 \quad \sqrt{27} \approx 4.7$$

$$8 \quad \sqrt{37} \approx 6.1$$



③)

$$y = \sqrt{x-2}$$

$$\text{radicand} \geq 0$$

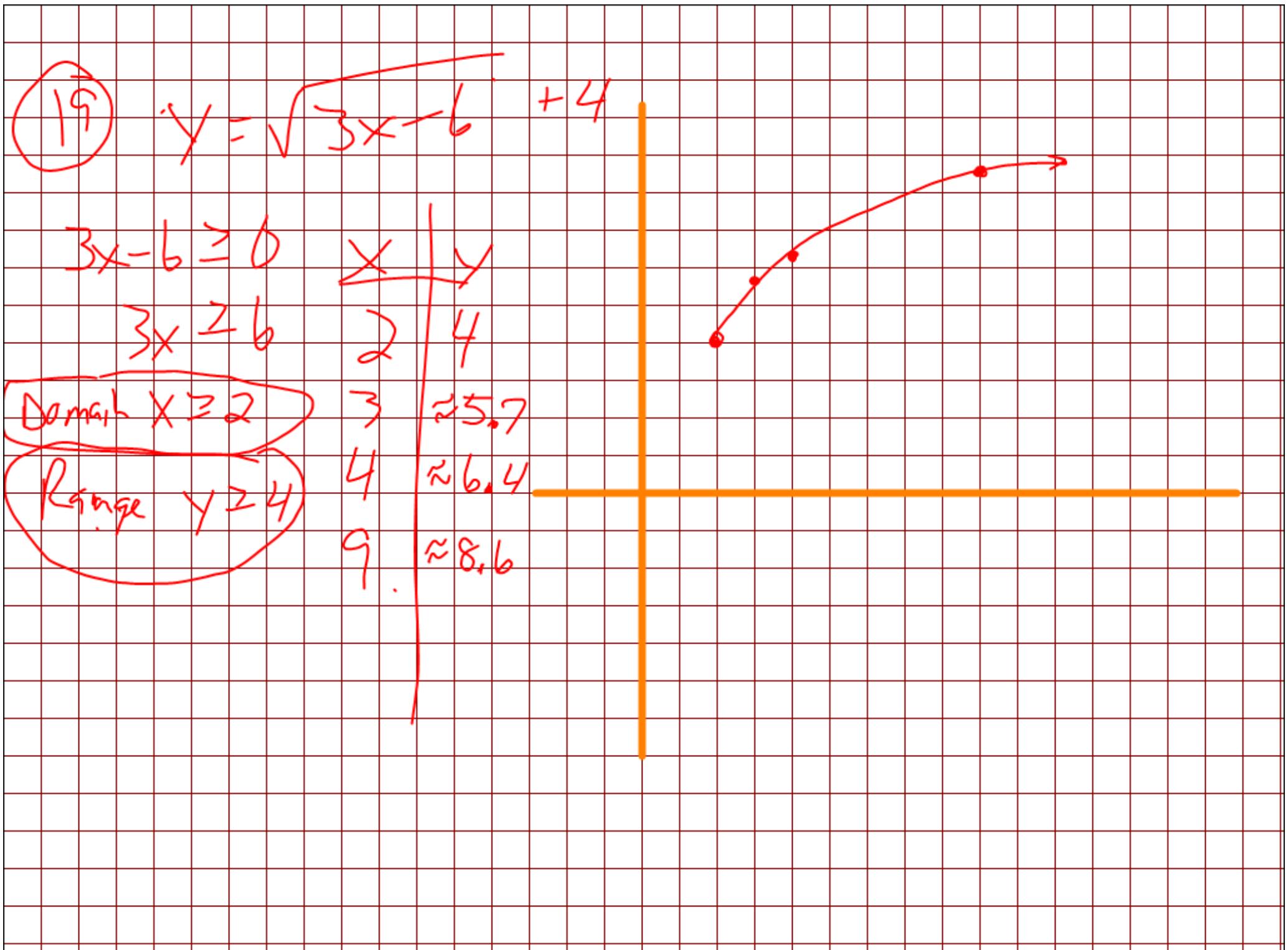
$$x-2 \geq 0$$

Domain $x \geq 2$
 $\rightarrow -2$

$$y = \sqrt{2x-4} + 137$$

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

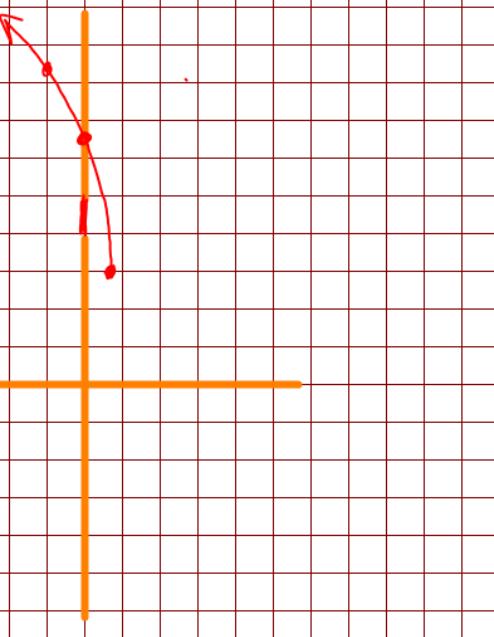
$$\sqrt{4x-8}$$



20. $y = 2\sqrt{3 - 4x} + 3$

$$\begin{aligned} 3 - 4x &\geq 0 \\ -4x &\geq -3 \\ \text{Domain } x &\leq \frac{3}{4} \\ \text{Range } y &\geq 3 \end{aligned}$$

x	y
$\frac{3}{4}$	3
0	6.5
-1	8.3
-4	11.7
-8	15.7



doubles

$$\frac{1}{6} \times \frac{1}{6} \times \frac{1}{6} = \frac{1}{216}$$

$$\frac{3}{6} \quad \frac{6}{26}$$

$$\frac{1}{2} \times \frac{3}{13} = \frac{3}{26}$$

$$\begin{array}{c} \sqrt{x} \\ \boxed{x^2} \end{array} \quad \begin{array}{c} \sqrt[x]{y} \\ \boxed{\wedge} \end{array} \quad \text{OR} \quad \begin{array}{c} \sqrt[y]{x} \\ \boxed{y^x} \end{array}$$

$$\sqrt[3]{27} = 3 \quad 3 \boxed{\sqrt[3]{27}}$$

$$\sqrt[4]{16} = 2$$