

ex. 1)  $y = \sqrt{3x+4}$

$$3x+4 \geq 0$$

$$3x \geq -4$$

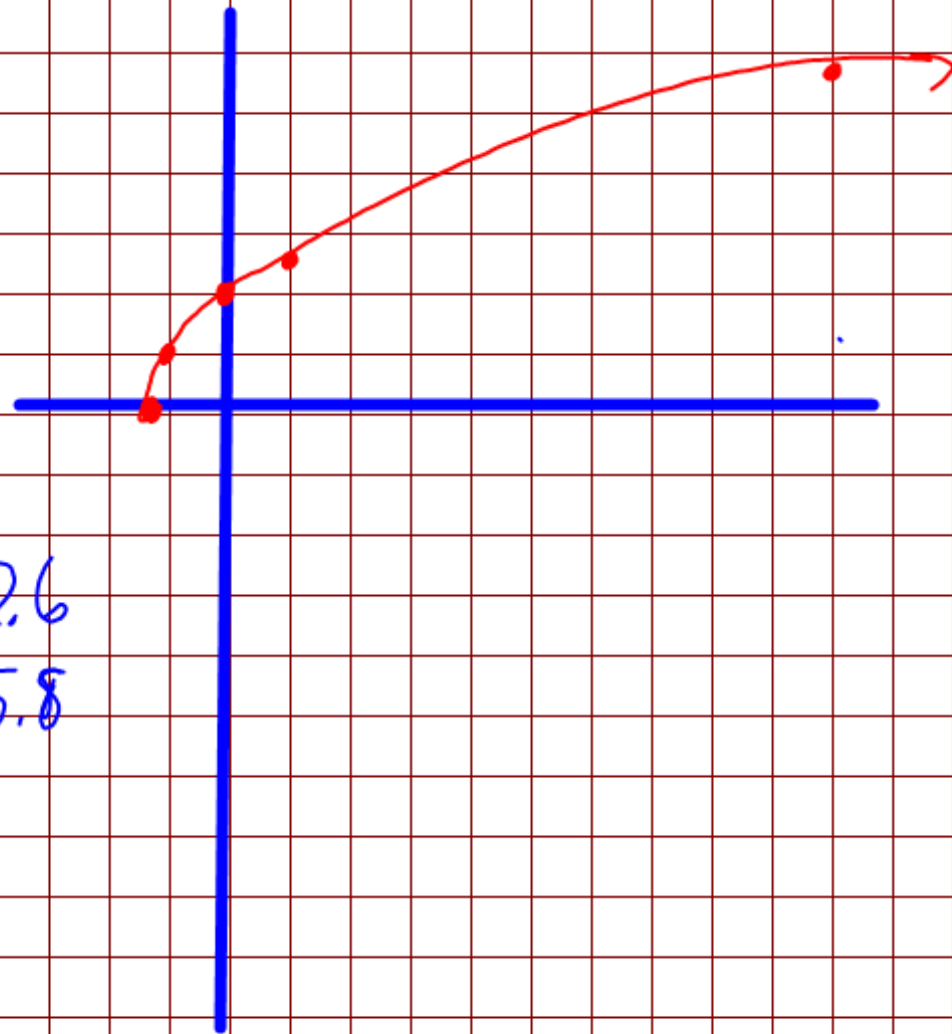
Domain:  $x \geq -\frac{4}{3}$

Range:  $y \geq 0$

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

Y-int: 2

| X              | Y                       |
|----------------|-------------------------|
| $-\frac{4}{3}$ | 0                       |
| -1             | 1                       |
| 0              | 2                       |
| 1              | $\sqrt{7} \approx 2.6$  |
| 10             | $\sqrt{34} \approx 5.8$ |



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

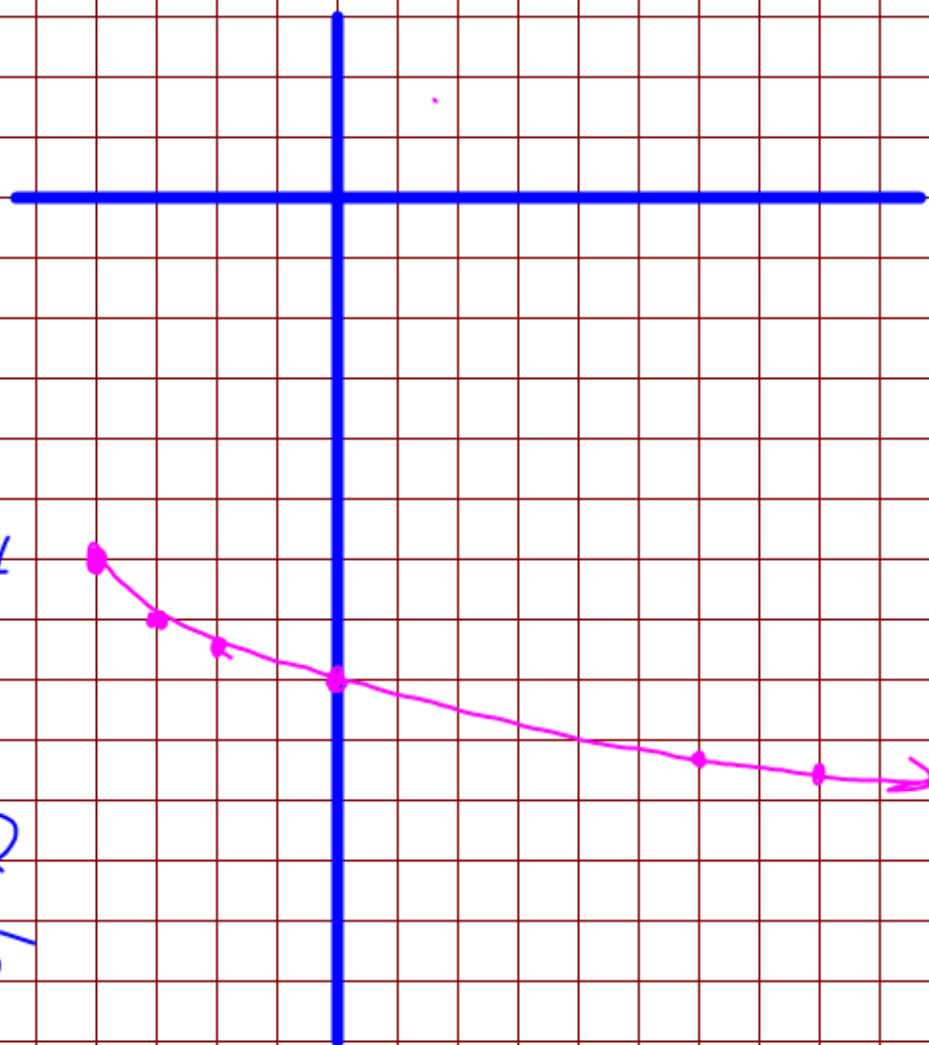
$$x+4 \geq 0$$

$$\text{Domain: } x \geq -4$$

$$\text{Range: } y \leq -6$$

no x-int  
y-int: -8

| x  | y              |
|----|----------------|
| -4 | -6             |
| -3 | -7             |
| -2 | $\approx -7.4$ |
| 0  | -8             |
| 6  | $\approx -9.2$ |
| 8  | $\approx -9.5$ |



$$v = \sqrt{\frac{2k}{m}},$$

$$\left(6\right)^2 = \left(\sqrt{\frac{2k}{5}}\right)^2$$

$$\left(\frac{5}{2}\right) 36 = \frac{2k}{5} \left(\frac{5}{2}\right)$$

$$\cdot 90 \text{ joules} = k$$

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

$$2x - 6 \geq 0$$

$$2x \geq 6$$

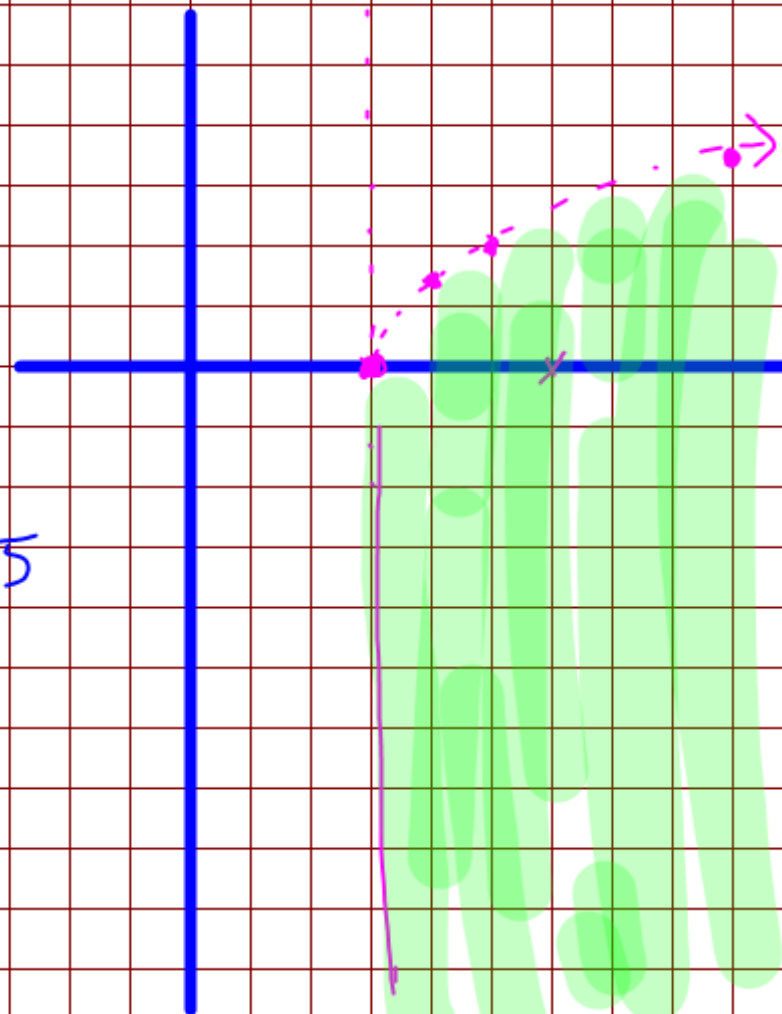
$$x \geq 3$$

(6, 0)

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

$$0 < \sqrt{6}$$

| X | Y                       |
|---|-------------------------|
| 3 | 0                       |
| 4 | $\sqrt{2} \approx 1.4$  |
| 5 | 2                       |
| 9 | $\sqrt{12} \approx 3.5$ |



p. 400-401

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