

$$Y = \sqrt{X+3}$$

$$X+3 \geq 0$$

$$X \geq -3$$

$$D: X \geq -3$$

$$Y = \sqrt{9-3X}$$

$$9-3X \geq 0$$

$$-3X \geq -9$$

$$3X \leq 9$$

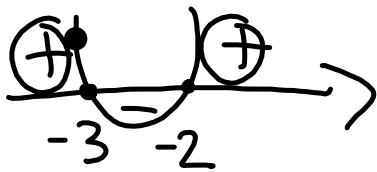
$$X \leq 3$$

$$y = \sqrt{x^2 + 5x + 6}$$

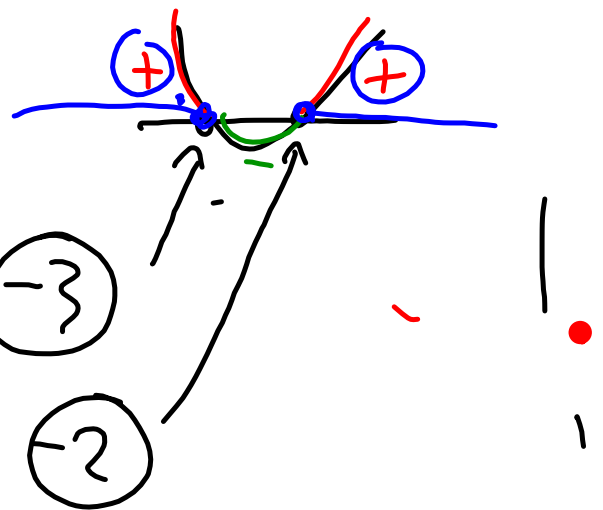
$$x^2 + 5x + 6 \geq 0$$

$$\Delta = 25 - 24 = 1$$

$$x_{1/2} = \frac{-5 \pm 1}{2}$$



$$D: x \leq -3 \cup x \geq -2$$



$$y = \sqrt{\frac{8x-1}{4-2x}}$$

$$\frac{8x-1}{4-2x} \geq 0$$

$$N \quad 8x-1 \geq 0$$

$$\frac{8x}{8} \geq \frac{1}{8} \quad x \geq \frac{1}{8}$$

$$D \quad 4-2x > 0$$

$$\frac{-2x}{-2} > \frac{-4}{-2}$$

$$x < 2$$

