Day 1, 9.2.1) Solving one-variable inequalities.

$$3 - 2x < 1$$

① Solve to find boundary point

$$3 - 2x = 1$$
$$-3 \qquad -3$$
$$-2x = -2$$
$$\frac{-2x}{-2} = \frac{-2}{-2}$$

boundary point! → $x = 1$

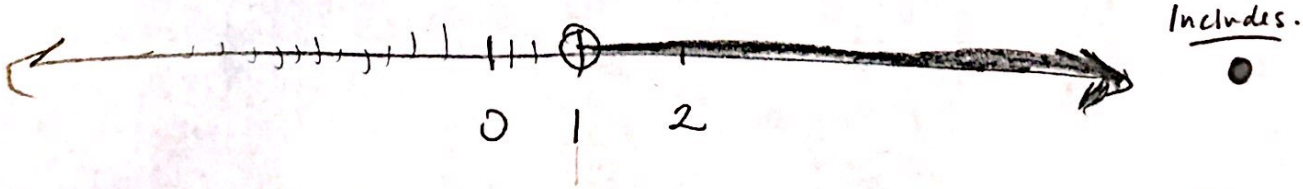
② Decide if boundary point is part of solution?

open!

$x > 1$

* If $>$ or $<$ no! Open circle. ○

* If $\geq$ or $\leq$ yes! Closed dot. Includes. ●



③ pick a number on either side of boundary point. Test in original inequality.

$x = 0$

$3 - 2(0) < 1$

$3 - 0 < 1$

$3 \not< 1$? false! ∅ is not a solution. Shade opposite side!

true = solution = shade included points!

false = not a solution = shade opposite side!