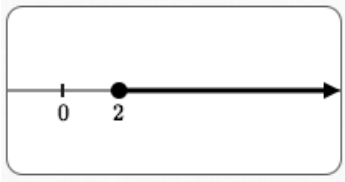
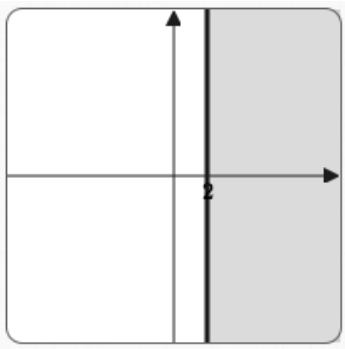
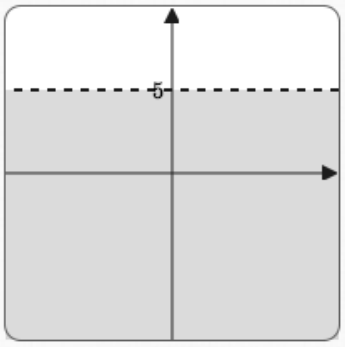
 graph of $x \geq 2$, viewed as an inequality in ONE variable	Viewed as an inequality in ***one*** variable, the solution set of ' $x \geq 2$ ' is the set of all ***numbers*** that are greater than or equal to 2. The solution set is the interval $[2, \infty)$, shown at left.
 graph of $x \geq 2$, viewed as an inequality in TWO variables	Viewed as an inequality in ***two*** variables, ' $x \geq 2$ ' is really a shorthand for ' $x + 0y \geq 2$ '. The solution set is the set of all ***points*** (x, y), where the x-value is greater than or equal to 2. The y-value can be anything! Here are examples of substitution into ' $x + 0y \geq 2$ ': The point $(2, 5)$ is in the solution set, since ' $2 + 0(5) \geq 2$ ' is TRUE. The point $(3.5, -7.4)$ is in the solution set, since ' $3.5 + 0(-7.4) \geq 2$ ' is TRUE. The graph is the half-plane shown at left. This is the picture of all the points with x-value greater than or equal to 2.
 graph of $y < 5$, viewed as an inequality in TWO variables	Viewed as an inequality in ***two*** variables, ' $y < 5$ ' is really a shorthand for ' $0x + y < 5$ '. The solution set is the set of all ***points*** (x, y), where the y-value is less than 5. The x-value can be anything! Here are examples of substitution into ' $0x + y < 5$ ': The point $(2, 4)$ is in the solution set, since ' $0(2) + 4 < 5$ ' is TRUE. The point $(-7.4, -3)$ is in the solution set, since ' $0(-7.4) - 3 < 5$ ' is TRUE. The graph is the half-plane shown at left. This is the picture of all the points with y-value less than 5.