Graphing Linear Equations and Inequalities Mixed Practice **Name:**

1) Graph: $y > -3x + 9$

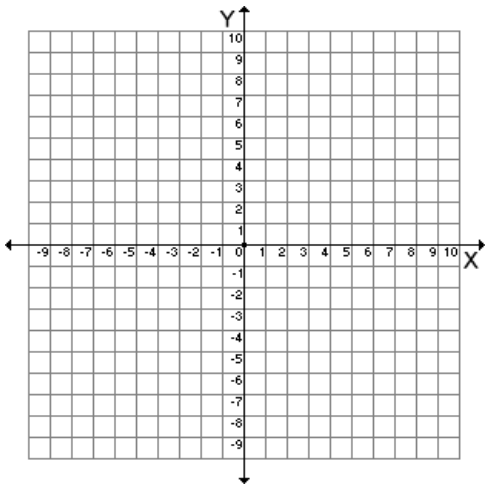
x	y

slope = _____

y-intercept = _____

choose: dotted or solid

choose: shade above or shade below



2) Graph: $y \geq 1$

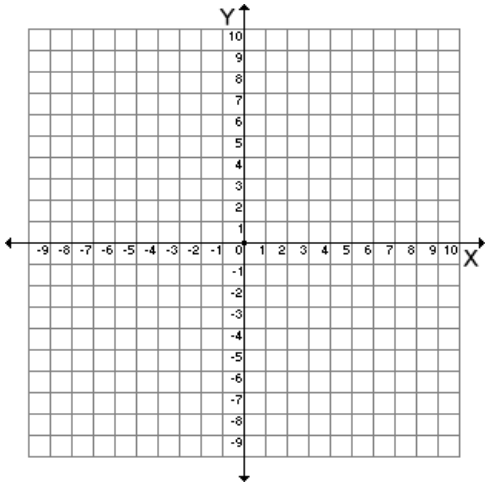
slope = _____

y-intercept = _____

choose: dotted or solid

choose: shade above or shade below

x	y



3) Graph: $y < \frac{1}{2}x - 3$

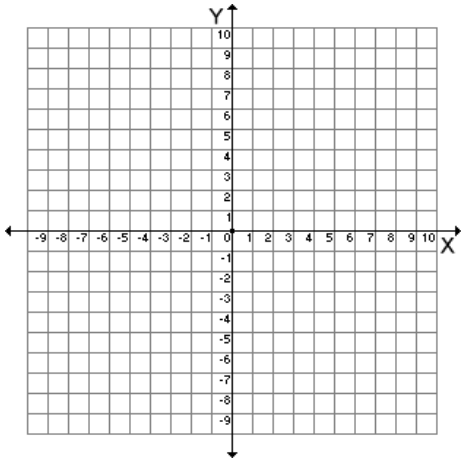
slope = _____

x	y

y-intercept = _____

choose: dotted or solid

choose: shade above or shade below



4) Write an equation of a line whose slope = $\frac{3}{2}$ and which passes through the point (8,1).

5) Write an equation of the line that passes through the points (1,9) and (-1,-3).

6) Write an equation of the line perpendicular to $y = -\frac{1}{4}x - 10$ and passes through the point (2,0).

7) Write an equation of the line parallel to $6x - 2y = -10$ and whose y-intercept = 9.

8) The Mathletes pay a $80 flat fee plus $15 per shirt for their Mathletes t-shirts. (Show all your work for each question in the space below.)

a) Write a linear equation (in slope-intercept form) that tells us the cost (y) of shirts if we order x shirts.
b) How much would it cost in all if the Mathletes order 10 shirts?
c) How much would it cost in all if the Mathletes order 100 shirts?
d) If they spent $680 on shirts, how many shirts did they order?