

Graphing Inequalities in the Coordinate Plane

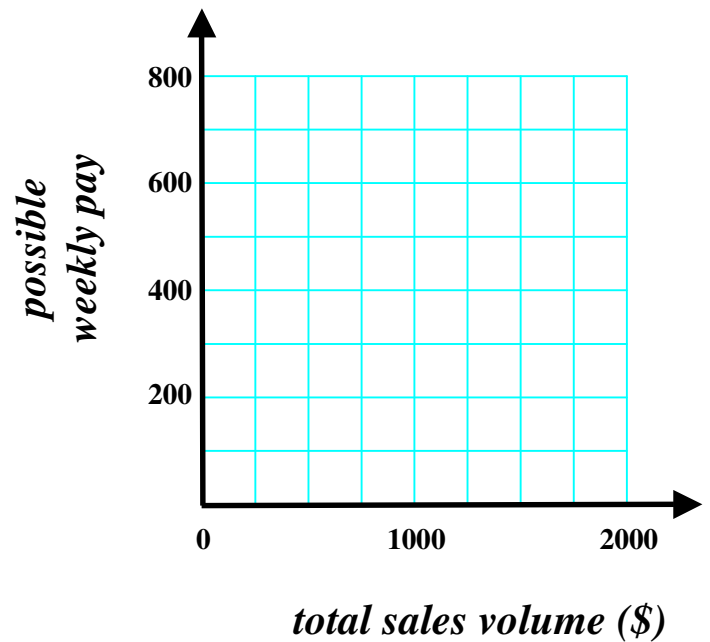
Name _____

Date _____ Period _____

At ABC Electronics, a new salesperson earns a base pay of \$275 per week plus a 10% commission on total sales volume. This is the **MINIMUM** that a salesperson can earn. More experienced salespeople can earn more money, by either a higher base pay or a higher commission rate.

Your challenge is to draw a graph that shows the **ALL** of the possible amounts of pay for **ANY** salesperson at ABC Electronics.

a) Write a linear inequality that shows the **minimum possible weekly pay, y** , for a salesperson at ABC Electronics, in terms of total sales volume, x . Your inequality should *resemble* a linear equation in slope-intercept form.



b) Graph the inequality for sales up to \$2000.
Hint: Graph the inequality as if it were a linear equation.

c) Shade the **SOLUTION REGION** (i.e. the area of your graph that shows the possible amounts of pay for any ABC Electronics salesperson).