

Name _____

Period _____

Algebra 1

More of the Real-World

1. Using **Plan A**, the Wally World Amusement Park charges \$20.50 entrance fee plus \$1.50 per ride. With **Plan B** they charge \$9.50 entrance fee plus \$2.50 per ride.

a. Define a variable for the number of rides.

b. Using the variable in part 'a', write an algebraic expression for the cost of the park **with Plan A**.

$$C =$$

c. Using the variable in part 'a', write an algebraic expression for the cost of the park **with Plan B**.

d. Write an **equation** by setting the two expressions from parts 'b' and 'c' equal to each other.

$$C =$$

e. Solve the equation in part 'd' to find the number of rides when the costs are equal.

f. Using the number of rides in part 'e', find the cost of the day at Wally World.

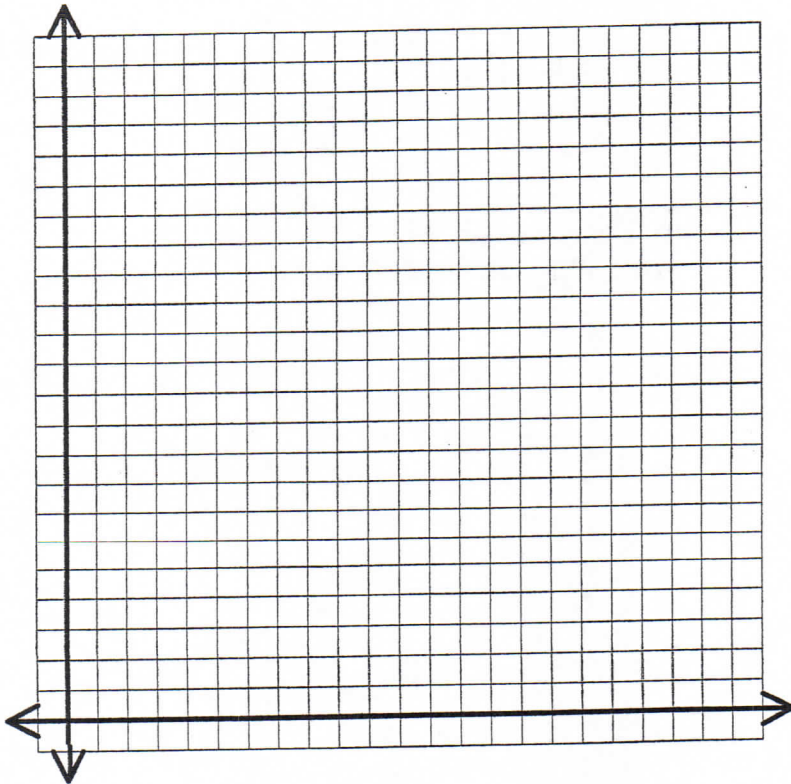
g. Make a table and graph the cost for **Plan A**.

Use 0, 5, 10, 15, 20 for the number of rides

h. Make a table and graph the cost for **Plan B**.

Use 0, 5, 10, 15, 20 for the number of rides

Please graph both equations on the same set of axes.
(Hint: use one square for a ride on the horizontal axis)



Write a paragraph describing when it would be better to choose Plan A, and when it is better to choose Plan B.