Name _____ Date _____ Class _____
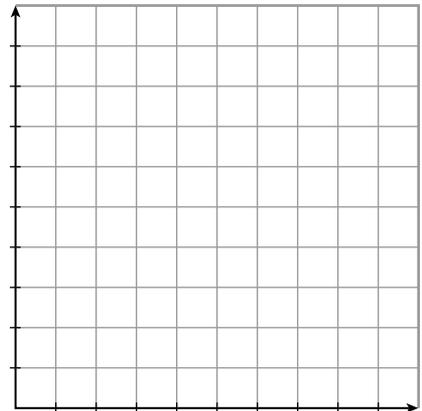
Problem Solving

3-6 *Lines in the Coordinate Plane*

Use the following information for Exercises 1 and 2. Josh can order 1 color ink cartridge and 2 black ink cartridges for his printer for $78. He can also order 1 color ink cartridge and 1 black ink cartridge for $53.

1. Let *x* equal the cost of a color ink cartridge and *y* equal the cost of a black ink cartridge. Write a system of equations to represent this situation.

_____

2. What is the cost of each cartridge?

_____

3. Ms. Williams is planning to buy T-shirts for the cheerleading camp that she is running. Both companies' total costs would be the same after buying how many T-shirts? Use a graph to find your solution.

	Art Creation Fee	Cost per T-shirt
Company A	$70	$10
Company B	$50	$12

Choose the best answer.

4. Two floats begin a parade at different times, but travel at the same speeds. Which is a true statement about the lines that represent the distance traveled by each float at a given time?

A The lines intersect.

B The lines are parallel.

C The lines are the same.

D The lines have a negative slope.

5. A piano teacher charges $20 for each half hour lesson, plus an initial fee of $50. Another teacher charges $40 per hour, plus a fee of $50. Which is a true statement about the lines that represent the total cost by each piano teacher?

F The lines intersect.

G The lines are parallel.

H The lines are the same.

J The lines have a negative slope.

6. Serina is trying to decide between two similar packages for starting her own Web site. Which is a true statement?

A Both packages cost $235.50 for 5 months.

B Both packages cost $295 for 10 months.

C Both packages cost $355 for 15 months.

D The packages will never have the same cost.

	Design and Setup	Monthly Fee to Host
Package A	$150.00	$14.50
Package B	$175.00	$12.00

Holt Geometry