Name		Date	Class	
<b>TEKS</b> G.7.B				
LESSON	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.

- 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.
- 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.
- 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.

2. What is the cost of each cartridge?

- 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.

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

Name		Date	Class	
<b>TEKS</b> G.7.B				
	Problem Solving			
3-6	Lines in the Coordinate Pla	ane		

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- 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.
  - x + 2y = 78, x + y = 53
- **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

Both companies total costs would

be the same for 10 T-shirts.

## 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.
- 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.

2. What is the cost of each cartridge?

color: \$28, black: \$25



- 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.
  - $(\mathbf{H})$  The lines are the same.
  - J The lines have a negative slope.

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