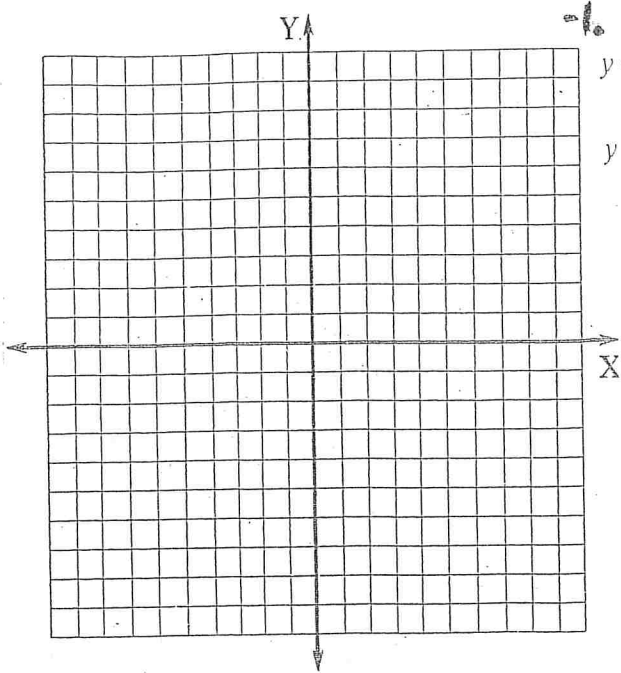


Name _____

Topic 5

Practice Test



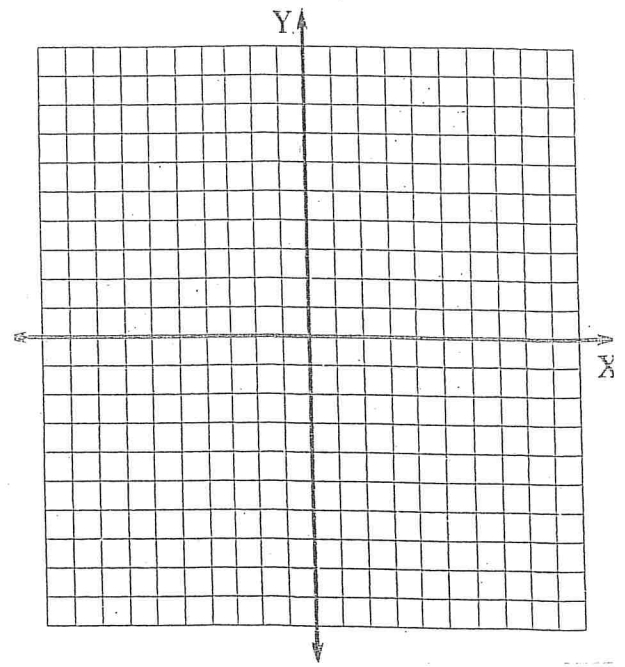
$$y = \frac{1}{4}x + 2$$

$$y = -\frac{1}{2}x - 1$$

Find the solution by graphing

$$0. \quad y = -x - 2$$

$$y = -4x + 1$$



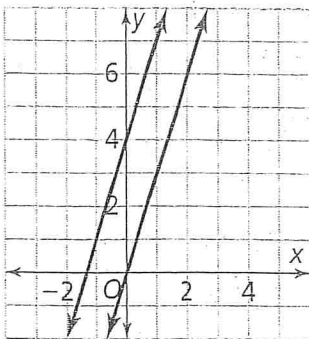
1. Two students are reading a book. Keith reads 6 pages a day. Tameka reads 5 pages a day, but he starts sooner and has already read 15 pages.

Will Keith and Tameka ever be on the same page on the same day? Explain.

$$y = 6x$$

$$y = 5x + 15$$

2. How many solutions does the system of equations have?



- (A) No solution
 (B) One solution: $x = 0, y = 0$
 (C) One solution: $x = 0, y = 5$
 (D) Infinitely many solutions

3. Taxi A charges a fee of \$3.50, plus \$1.75 per mile. Taxi B charges a fee of \$1.25, plus \$2.00 per mile. At what distance would the taxis cost the same?

4. Solve the system of equations. How many solutions does the system have?

$$6x + 3y = 24$$

$$y = -2x + 8$$

5. Solve the system of equations using elimination.

$$72f - 12g = 96$$

$$6f - 2g = 10$$

6. What is the solution to the system of equations? Explain.

$$16x - 2 - 2y = 0$$

$$y = 8x + 4$$

7. Use substitution. What is the solution to the system of equations? Explain.

$$y = \frac{1}{4}x + 4$$

$$12y - 48 = 3x$$

8. Nia sells pizzas. Large pizzas cost \$8 each, and small pizzas cost \$6 each. She sold 12 pizzas for \$84. How many of each size pizza did Nia sell?

9. Ice Dream charges \$4 to rent ice skates, plus \$1.50 per hour to skate. Skating Paradise charges \$1 to rent ice skates, plus \$3 per hour to skate.

Part A

Write a system of equations to represent the situation, using h for number of hours and c for cost.

Part B

For how many hours is the cost for both locations equivalent? What is this cost?

10. A 40-question test has 132 possible points. There are m 5-point questions and n 1-point questions. How many of each type of question is on the test?