

 **4-49.** Camila is trying to find the equation of a line that passes through the points (−1, 16) and (5, 88). Does the equation *y* = 12*x* + 28 work? Justify your answer.

**4-50.** The graph below contains the lines for *y* = *x* + 2 and *y* = 2*x* − 1.

 a. Using the graph, what is the **solution** to this system?

 b. **Solve the system algebraically** to confirm your

 answer to part (a).

**4-52 Complete** each of the Diamond Problems below. The pattern used in the Diamond Problems is shown at right.



**4-51.** Hotdogs and corndogs were sold at last night's football game. Use the information below to **write mathematical sentences** to help you determine how many corndogs were sold.

* 1. The number of hotdogs sold was three fewer than twice the number of corndogs. Write a mathematical sentence that relates the number of hotdogs and corndogs. Let *h* represent the number of hotdogs and *c* represent the number of corndogs.
	2. A hotdog costs $3 and a corndog costs $1.50. If $201 was collected, write a mathematical sentence to represent this information.
	3. How many corndogs were sold? Show how you found your answer.

**4-54.** Solve the following equations for *x*, if possible.  Check your solutions.

* 1. −(2 − 3*x*) + *x* = 9 – *x* b*.* $\frac{6}{x}= \frac{3}{4}$