Name

1-4B Lesson Master

Questions on SPUR Objectives
See pages 60–63 for objectives.

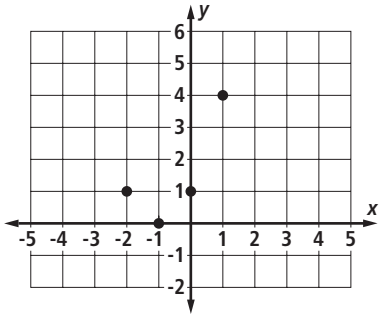
VOCABULARY

1. Express the set of all real numbers less than –2 in set builder notation.

2. Express the set of integers greater than 0 and less than 5 in roster notation.

REPRESENTATIONS Objectives J, K, L

In 3–6, use the graph at the right. The graph represents values of an expression.



3. Give the coordinates of points on the graph.

4. What is the value of the expression when x is 0?

5. For what value(s) of x is the value of the expression equal to 1?

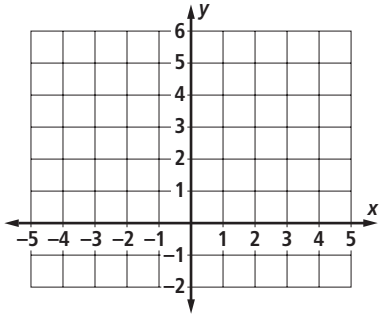
6. Veronica's shoes are 2 sizes larger than Natalia's. Let x = Veronica's shoe size and y = Natalia's shoe size. Fill in the chart with the possible shoe sizes.

Veronica's shoe size, x	Natalia's shoe size, y	Ordered Pair (x, y)
7		
8		
9		
10		

Express Natalia's shoe size using x.

7. Make a table and scatterplot for $x^2 + 1$ when $x = -2, -1, 0$, and 1.

x	$x^2 + 1$



Name _____

REPRESENTATIONS Objectives J, K

In 8–10, *Multiple Choice.* Which is the most reasonable domain for the variable?

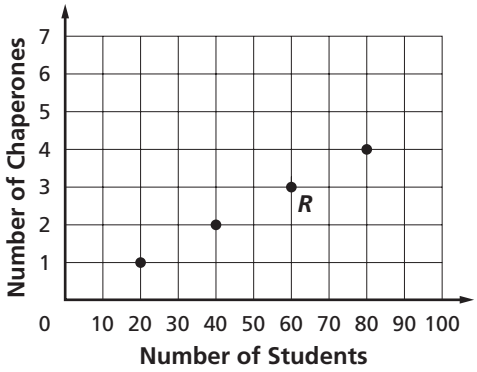
A set of positive real numbers
B set of real numbers
C set of integers

8. c = the number of yards gained or lost in a football game _____

9. t = the temperature outside today _____

10. w = your height on each birthday _____

In 11–13, use the graph below. The graph shows the number of chaperones needed for *n* students going on a field trip.



11. Give the coordinates of R. _____

12. Describe the situation that corresponds to R, giving the number of students and the number of chaperones needed.

_____

13. Explain why the domain of n is the set of positive integers.

_____

In 14 and 15, consider these two situations.

(1) A bus ride to the airport costs \$11 plus \$2 for every piece of luggage. Let x = the number of pieces of luggage.

(2) At an Internet café, the cost to use a computer is \$10 for the first 30 minutes and then \$0.50 for each minute after that. Let x = the number of minutes after the first 30 minutes.

14. For which situation does it make sense to have an x value of $32\frac{1}{2}$? _____

15. Find the cost of the situation you chose in Question 14. _____