

Name _____

1-5B Lesson Master

Questions on SPUR Objectives
See Student Edition pages 66–69 for objectives.

PROPERTIES Objective G

In 1 and 2, determine whether y is a function of x . Write yes or no.

1. $\{(3, 99.4), (4, 99.7), (5, 99.6), (6, 99.4), (7, 98.9)\}$ _____

2.

x	-6	-5	10	6	0	-1	0	-5	-2
y	14	11	-1	0	1	9	1	7	-2

PROPERTIES Objective H

3. Give the domain and range of the function represented by the table at the right.

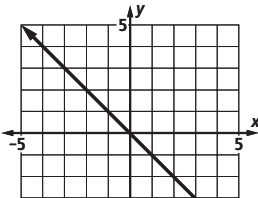
x	8.4	7.7	3.1	3.9	6.0
y	0	0	0	0	0

In 4–6, for each function represented, a. find the domain, b. find the range, and c. determine the argument or value.

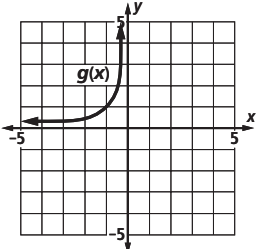
4.

v	7	9.9	-4	3	1
$d(v)$	7	9.9	-4	3	1

 a. _____
 b. _____
 c. $d(-4) =$ _____

5. 

 a. _____
 b. _____
 c. If $y(x) = 4$, $x =$ _____

6. 

 a. _____
 b. _____
 c. $g(-1) \approx$ _____

Name _____

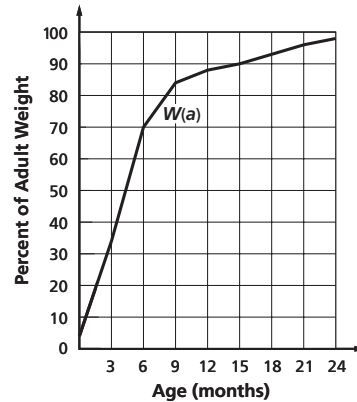
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In 7 and 8, the typical growth pattern of a dog over a 2-year period is shown in the graph. $W(a)$ gives the percent of the adult dog's weight when the dog is a months old.

7. Give the domain and range of this function.

8. Estimate $W(12)$. Explain what that means in real life.



REPRESENTATIONS Objective L

9. Meteorologists report the wind chill temperature to describe the discomfort people feel due to a combination of cold temperature and wind. For a wind of 20 miles per hour, the function $W(T) = 1.3119T - 21.9952$ gives the wind chill temperature $W(T)$ for an air temperature of T . The wind chill temperature and the air temperature are both in degrees Fahrenheit.

a. Use a CAS to complete the table at the right. Round to the nearest integer.

T	-10	0	10	20	30	40
$W(T)$						

b. $W(10) =$ _____

What does this represent in real life? _____

c. Set your table increment to 1 and use the table to estimate the air temperature when the wind is 20 miles per hour and the wind chill temperature is about 0°F . _____

10. a. Complete the table at the right for $f(x) = \sqrt{x^2 - 2x}$. Round to the nearest thousandth.

x	0	1	2	3	4	5
y						

b. Which integer value of x is not in the domain of f ? _____