

Algebra IA
 Chapter 4 Lesson 3
 Domain and Range
 Independent and Dependent

Give the domain and the range for each set of numbers.

1. $\{(2, 3), (-8, 0), (7, 5), (-3, -2)\}$ 2. $\{(1, -5), (7, 3), (-2, -5), (9, -2)\}$

Give the domain and the range for the data in each table.

3.

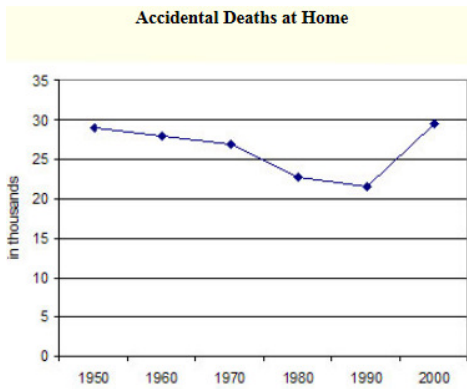
x	y
4	7
3	2
-1	5
-4	6

4.

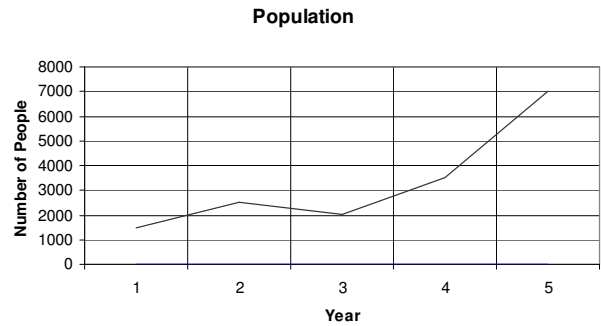
x	y
2	9
3	1
4	-7
5	-15

Give the domain and the range for each graph.

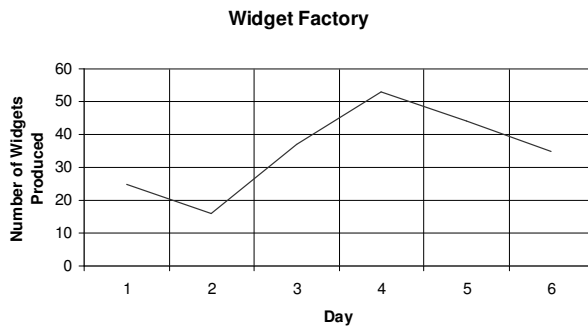
5.



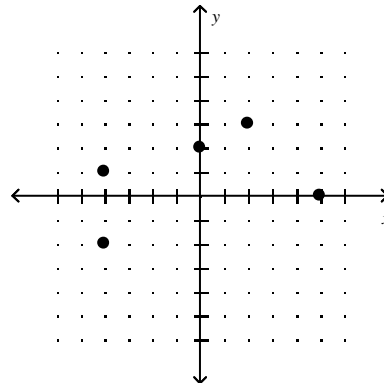
6.



7.



8.



Given the domain of the function, find the range.

9. Domain: $\{-2, 1, 7\}$

Function: $y = 3x - 7$

10. Domain: $\{-4, -2, 0, 8\}$

Function: $f(x) = 5x + 3$

11. Domain: $\{-3, 1, 9\}$

Function: $y = 3x^2 - 5x + 4$

12. Domain: $\{-3, -2, 0, 5\}$

Function: $f(x) = -4x^3 + 5x$

Identify the independent and dependent variables.

13. Bob owns a lawn mowing business. He charges different prices for mowing lawns of different sizes.

14. Sally rented a car. The cost to rent the car was based on the number of hours she used the car.

15. Bruce delivers newspapers for the local newspaper office. His pay is based on how many newspapers he delivers.

16. Susan works as a car sales person. Her pay is based on the number of cars she sells.

17. Joshua owns a car washing business. The amount of money he earns is based on the number of cars he washes.

18. Caleb delivers pizza for the local pizza restaurant. The amount of money he earns is based on the number of pizzas he delivers.

Simplify each expression.

19) $9p + 8 + 10 - p$

20) $7n + 10 - 4$

21) $-4(k + 7)$

22) $8(n + 8)$

23) $-10(4x - 4)$

24) $-4(1 + 3p)$

25) $5(n + 7) + 8(3 + 6n)$

26) $-5(2n + 3) + 8(6n + 3)$