

MODULE 3 Functions and Models

LESSON 3-1

Practice and Problem Solving: A/B

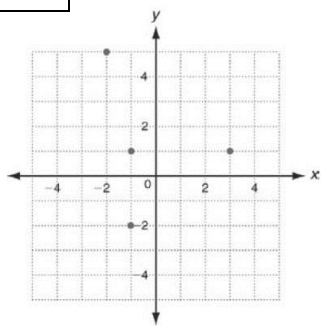
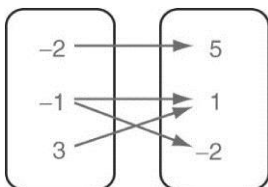
- The rain stopped, so the rainfall does not increase.
- c, because the line is steepest
- discrete
- continuous
- continuous
- discrete
- b; continuous; D: $\{0 \leq x < 8\}$; R: $\{0 \leq y \leq 2\}$

LESSON 3-2

Practice and Problem Solving: A/B

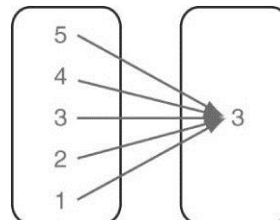
1.

x	y
-2	5
-1	1
3	1
-1	-2



2.

x	y
5	3
4	3
3	3
2	3
1	3



- $\{0 \leq x \leq 4\}$; $\{0 \leq y \leq 4\}$; yes; each domain value is paired with exactly one range value.
- $\{8, 9\}$; $\{-3, -4, -6, -9\}$; no; both domain values are paired with more than one range value.
- $\{0, 1, 2\}$; $\{4, 5, 6, 7, 8\}$; no; two domain values are paired with two range values.

LESSON 3-3

Practice and Problem Solving: A/B

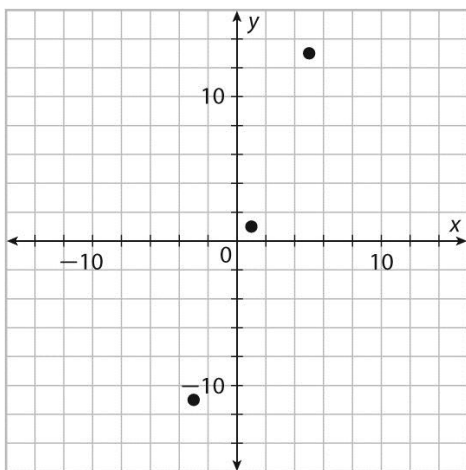
- cost; size
- earnings; number of hours worked
- total cost; number of pounds bought
- $y = 8x$; $f(x) = 8x$
- $y = 1.59x$; $f(x) = 1.59x$
- independent: number of hours;
dependent: total cost; function:
 $f(x) = 70x + 40$; solution: \$320
- independent: number of bags;
dependent: total cost; function: $f(g) = 4g + 10$;
solution: \$66

LESSON 3-4

Practice and Problem Solving: A/B

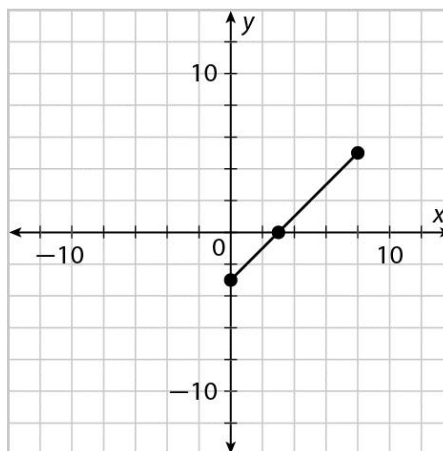
1.

x	y
-3	-11
1	1
5	13



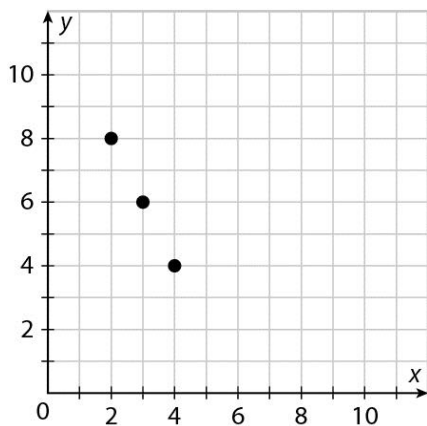
3.

x	y
0	-3
8	5
3	0



2.

x	y
2	8
3	6
4	4



4. 7.3 ft