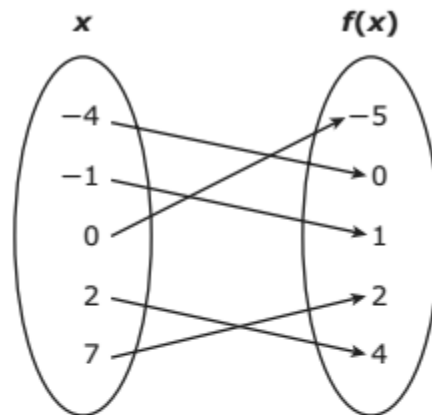


Domain and Range – STAAR BOOTCAMP**STATION 1**

1. A teacher will determine the total number of books to order for a class using the function $b(n) = 4n$, where n represents the number of students in the class. What is the independent quantity in this situation?
F The number of students in the class
G The total number of books to order
H The number of books each student needs
J Not here

2. The mapping below represents all of the points on the graph of function f .



What is the domain of f ?

- F** $\{-4, -1, 0, 2, 7\}$
- G** $\{-5, -4, -1, 0, 1, 2, 4, 7\}$
- H** $\{-5, 0, 1, 2, 4\}$
- J** $\{5\}$

Name: _____ Date: _____ Period: _____

Domain and Range – STAAR BOOTCAMP

3. A plane can carry a maximum cargo weight of 160,000 pounds. A company uses one of these planes to ship 2,000-pound containers. The total cargo weight is a function of the number of containers in the plane. What is the greatest value in the domain for this situation?

Record your answer and fill in the bubbles on your answer document.

4. The total cost in dollars to buy uniforms for the players on a volleyball team can be found using the function $c = 34.95u + 6.25$, where u is the number of uniforms bought. If there are at least 8 players but not more than 12 players on the volleyball team, what is the domain of the function for this situation?

F $0 < u \leq 12$

G $0 < c \leq 425.65$

H $\{8, 9, 10, 11, 12\}$

J $\{285.85, 320.80, 355.75, 390.70, 425.65\}$

Domain and Range – STAAR BOOTCAMP**STATION 2**

1. The table of values for quadratic function g is shown below.

x	$g(x)$
-3	48
-2	30
-1	16
0	6
2	-2
3	0
4	6
6	30

If 1 is a solution to $g(x) = 0$, what is the other solution?

- A** -1
 - B** 3
 - C** 6
 - D** -2
2. Which statement about the quadratic parent function is true?
- F** Its graph is symmetrical about the x -axis.
 - G** Its graph is symmetrical about the y -axis.
 - H** Its domain is the set of all non-negative numbers.
 - J** Its range is the set of all real numbers.

Domain and Range – STAAR BOOTCAMP

3. If $f(x) = (x - 3)^2 + 4$ and $g(x) = x^3 + 2$, which statement is true?

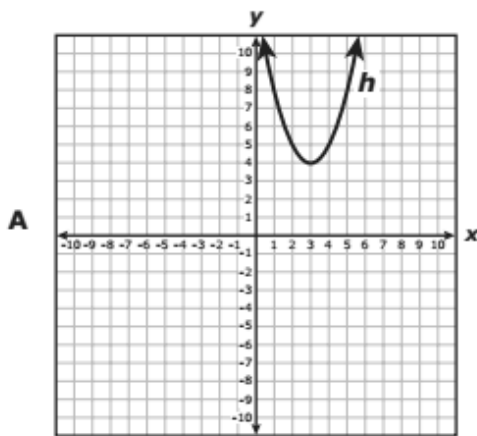
F $f(-2) = g(-3)$

G $f(0) = g(-1)$

H $f(8) = g(3)$

J $f(2) = g(1)$

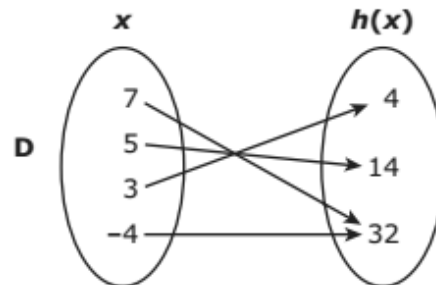
4. The graph of the quadratic function h passes through the points $(-4, 32)$, $(3, 4)$, $(5, 14)$, and $(7, 32)$. Which of the following shows the same relationship as h ?



C

x	$h(x)$
32	-4
4	3
14	5
32	7

B $h(x) = x^2 + 3x + 4$



Domain and Range – STAAR BOOTCAMP

STATION 3

- The student council sent its members on four field trips during the school year. The number of buses needed to transport the members on each trip is a function of the number of members who went on each trip. This function consists of only the ordered pairs (52, 3), (72, 4), (86, 5), and (105, 6). What is the domain for this situation?

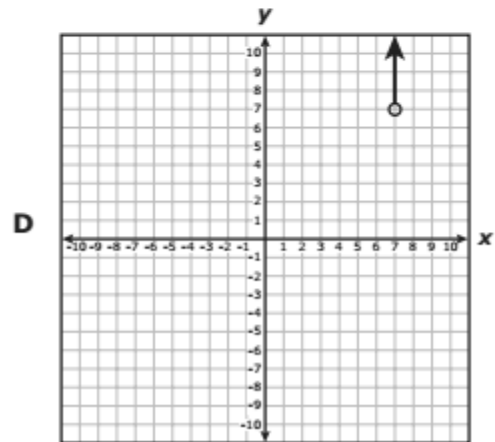
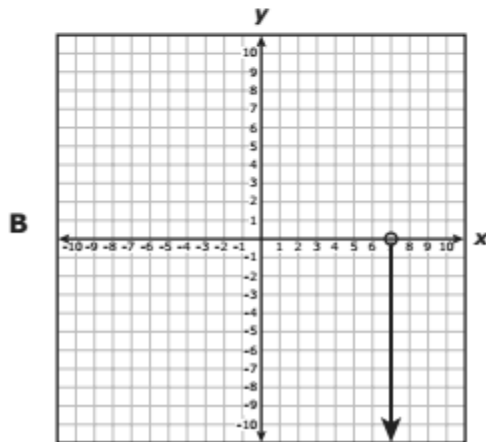
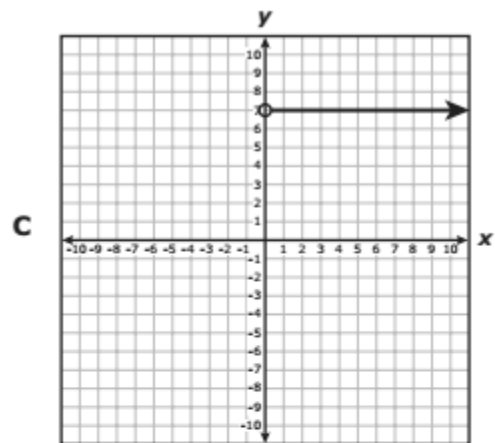
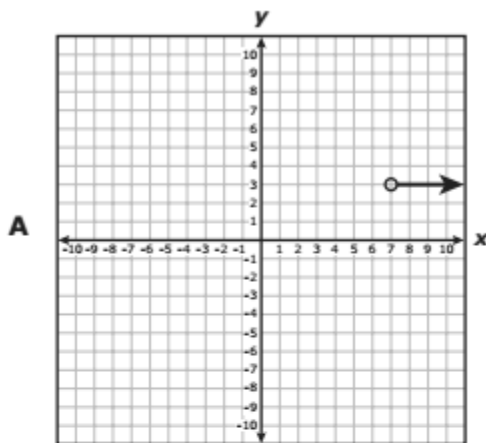
F {52, 105}

G {3, 4, 5, 6}

H {52, 72, 86, 105}

J {3, 4, 5, 6, 52, 72, 86, 105}

- Which graph shows a function with a domain of all real numbers greater than 7?



Name: _____ Date: _____ Period: _____

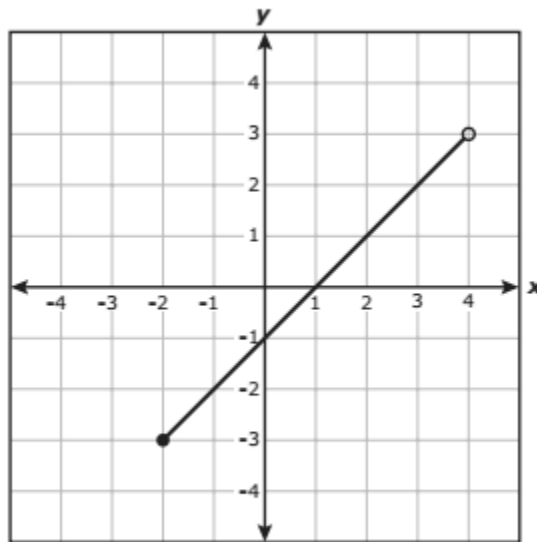
Domain and Range – STAAR BOOTCAMP

- 3.** A print shop charges a fixed amount per photocopy and gives a 10% discount off the total cost of the photocopies. The total cost is a function of the number of photocopies made. What is the independent quantity in this situation?
- A** The total cost of the photocopies
 - B** The price per photocopy
 - C** The amount of the discount
 - D** The total number of photocopies made

Domain and Range – STAAR BOOTCAMP

STATION 4

1. Function f is graphed below.

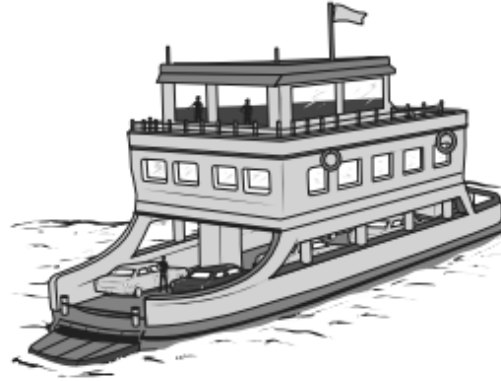


What is the range of f ?

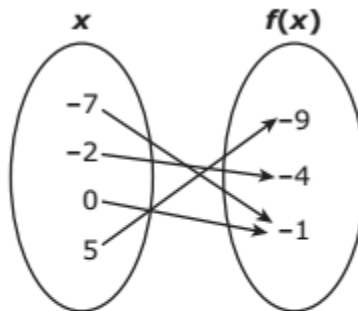
- A $\{x \mid -2 \leq x < 4\}$
- B $\{x \mid -2 < x \leq 4\}$
- C $\{y \mid -3 < y \leq 3\}$
- D $\{y \mid -3 \leq y < 3\}$

Domain and Range – STAAR BOOTCAMP

2. The number of ferryboat trips, $f(c)$, needed to transport c cars in 1 day can be found using the function $f(c) = \frac{c}{20}$. If there are no more than 5,000 cars transported by ferryboat daily, what is the range of the function for this situation?



- A The set of all integers greater than or equal to 5,000
 B The set of all integers from 0 to 5,000
 C The set of all integers greater than or equal to 250
 D The set of all integers from 0 to 250
3. What is the range of the function shown below?



- F $\{-7, -2, 0, 5\}$
 G $\{-9, -4, -1\}$
 H $\{-9, -7, -4, -2, -1, 0, 5\}$
 J $\{-1\}$

Domain and Range – STAAR BOOTCAMP

STATION 5

1. For the function w , $w(9) = -7$, and $w(-7) = 9$. If $y = w(x)$, what is the value of y when $x = -7$?

Record your answer and fill in the bubbles on your answer document.

2. If $y = -\frac{4}{5}x - 2$, what is the value of x when $y = -9$?

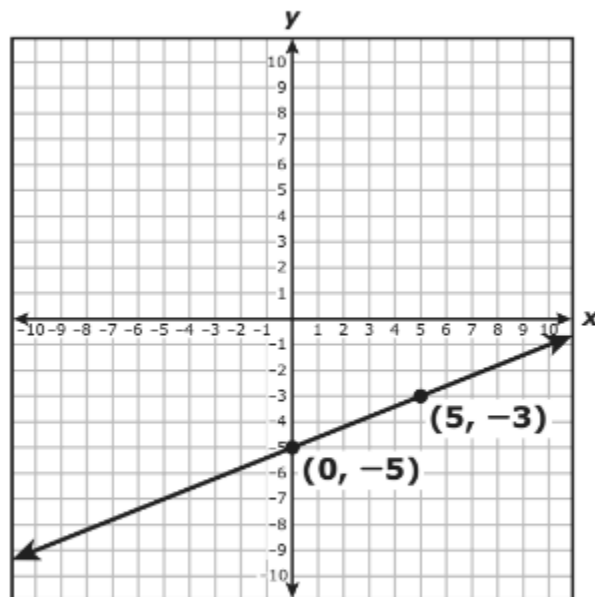
F $-\frac{35}{4}$

G $-\frac{55}{4}$

H $\frac{35}{4}$

J $\frac{55}{4}$

3. The graph of an equation in the form $y = mx + b$ is shown on the grid.



Based on the graph, what is the value of x when $y = -7$?

Record your answer and fill in the bubbles on your answer document.