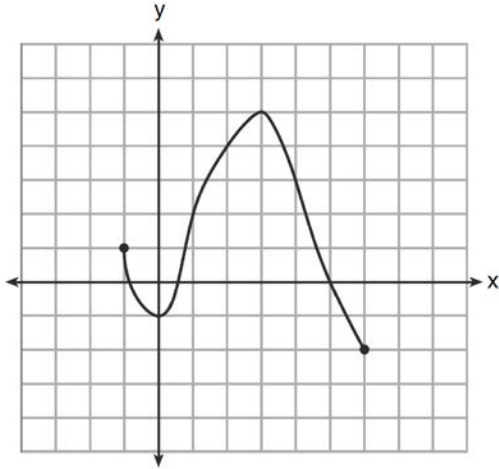
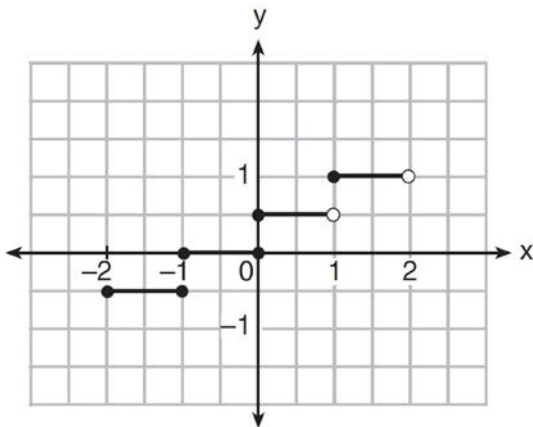


F.IF.A.2: Domain and Range 1b

- 1 What is the domain of the function shown below?

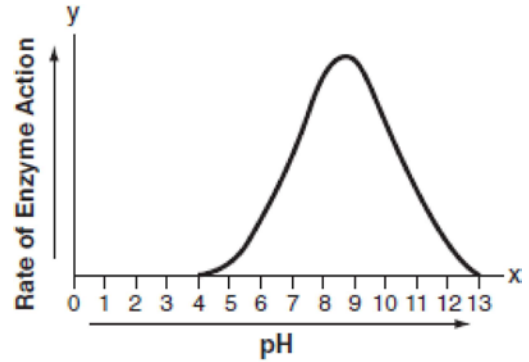


- 2 The graph of a relation is shown below.



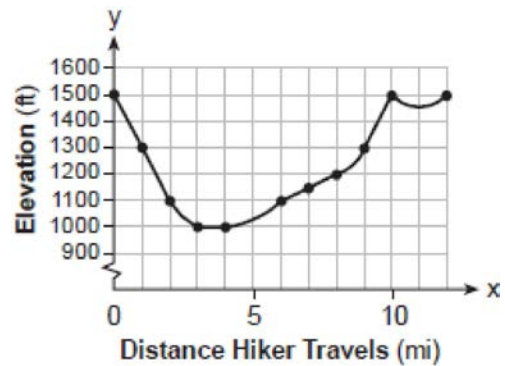
What is the domain of this relation?

- 3 The effect of pH on the action of a certain enzyme is shown on the accompanying graph.



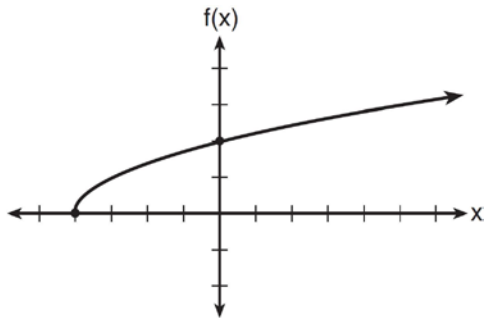
What is the domain of this function?

- 4 The accompanying graph shows the elevation of a certain region in New York State as a hiker travels along a trail.



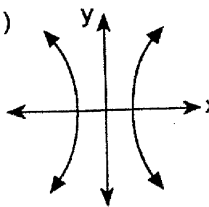
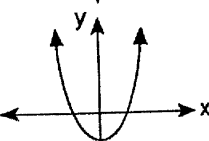
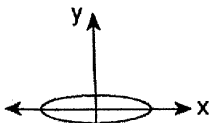
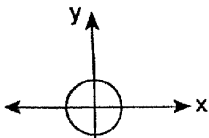
What is the domain of this function?

- 5 The graph of the function $f(x) = \sqrt{x+4}$ is shown below.

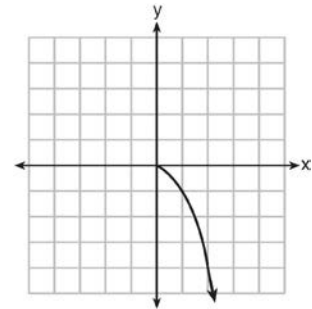


The domain of the function is

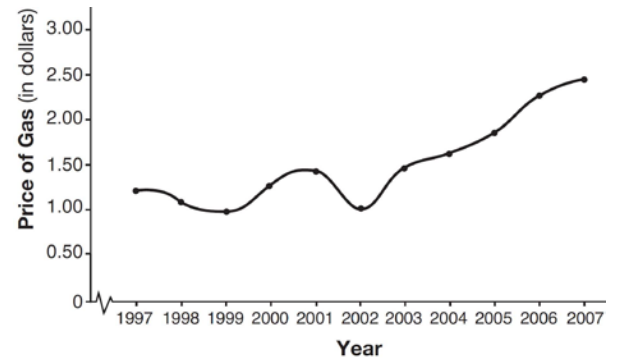
- 6 Which graph illustrates a quadratic relation whose domain is all real numbers?



- 7 What is the range of the function shown below?

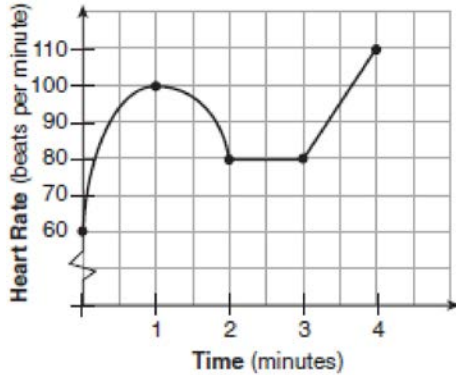


- 8 The graph below shows the average price of gasoline, in dollars, for the years 1997 to 2007.



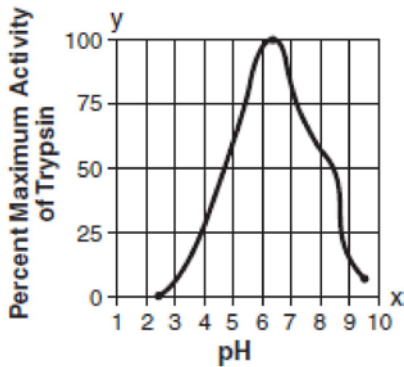
What is the approximate range of this graph?

- 9 The accompanying graph shows the heart rate, in beats per minute, of a jogger during a 4-minute interval.



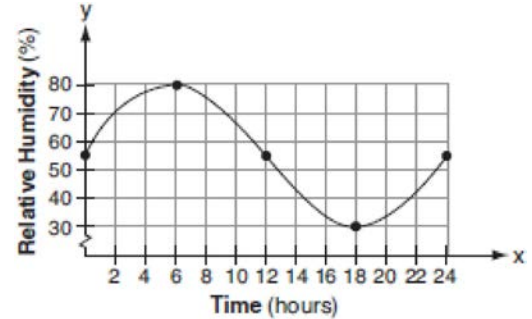
What is the range of the jogger's heart rate during this interval?

- 10 Data collected during an experiment are shown in the accompanying graph.



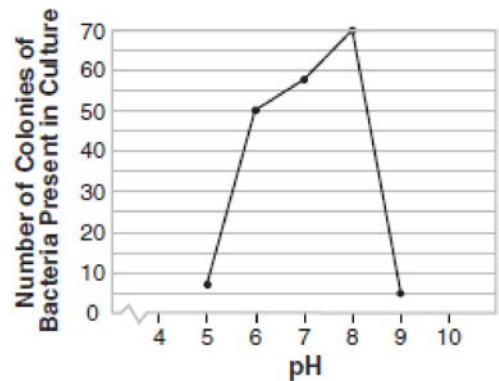
What is the range of this set of data?

- 11 A meteorologist drew the accompanying graph to show the changes in relative humidity during a 24-hour period in New York City.



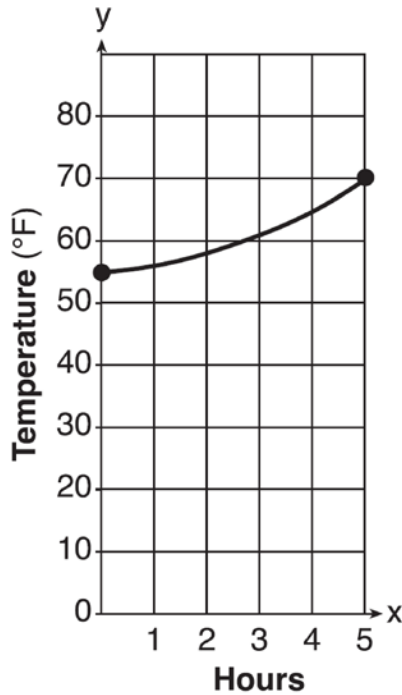
What is the range of this set of data?

- 12 The accompanying graph illustrates the presence of a certain strain of bacteria at various pH levels.



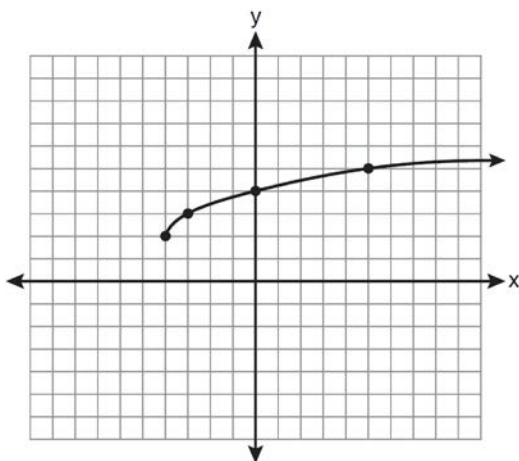
What is the range of this set of data?

- 13 The air temperature in Dallas, Texas, over a 5-hour period is shown in the accompanying graph.

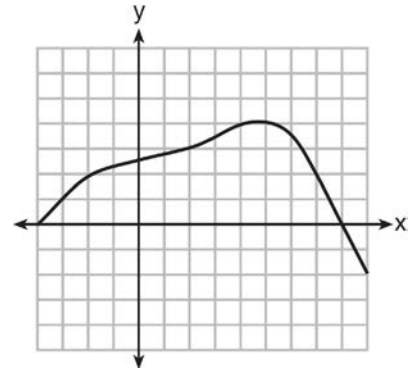


What is the range of this set of data?

- 14 What are the domain and the range of the function shown in the graph below?

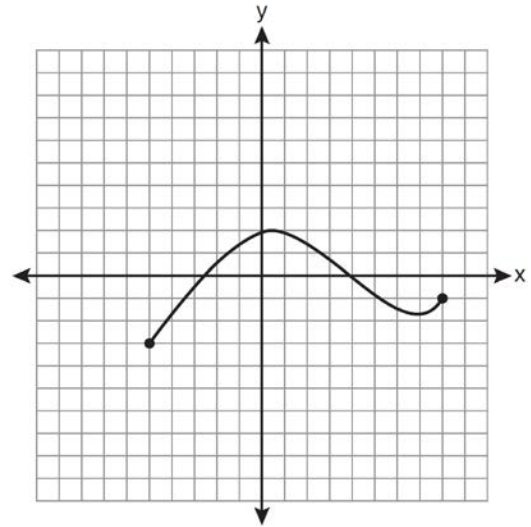


- 15 Which value is in the domain of the function graphed below, but is *not* in its range?



- 1) 0
- 2) 2
- 3) 3
- 4) 7

- 16 The graph below represents the function $y = f(x)$.



State the domain and range of this function.

F.IF.A.2: Domain and Range 1b
Answer Section

1 ANS:

$$-1 \leq x \leq 6$$

REF: 061202a2

2 ANS:

$$\{x \mid -2 \leq x < 2\}$$

REF: 061606a2

3 ANS:

$$4 \leq x \leq 13$$

REF: 010602b

4 ANS:

$$0 \leq x \leq 12$$

REF: 060804b

5 ANS:

$$\{x \mid x \geq -4\}$$

REF: 061509ai

6 ANS: 3

REF: 019518siii

7 ANS:

$$y \leq 0$$

REF: 061308a2

8 ANS:

$$0.97 \leq y \leq 2.38$$

REF: 061418a2

9 ANS:

$$60 - 110$$

REF: 060501b

10 ANS:

$$0 \leq y \leq 100$$

REF: 010712b

11 ANS:

$$30 \leq y \leq 80$$

REF: 080708b

12 ANS:

$$5 \leq y \leq 70$$

REF: 010918b

13 ANS:
 $56 \leq y \leq 70$

REF: 061013b

14 ANS:
 $\{x|x \geq -4\}; \{y|y \geq 2\}$

REF: 081003a2

15 ANS: 4 REF: 061518a2

16 ANS:
D: $-5 \leq x \leq 8$. R: $-3 \leq y \leq 2$

REF: 011132a2