

NAME: _____

1. 060501b, P.I. A2.A.51

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

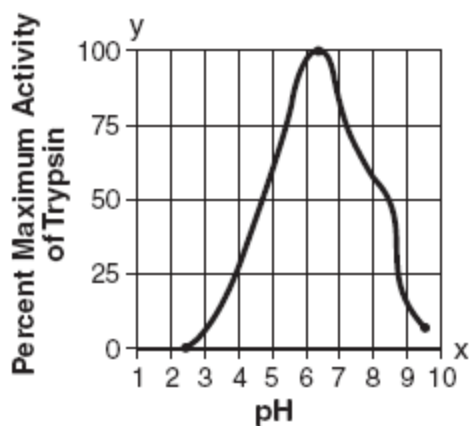


What is the range of the jogger's heart rate during this interval?

- [A] 0-4 [B] 0-110
[C] 60-110 [D] 1-4

2. 010712b, P.I. A2.A.51

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

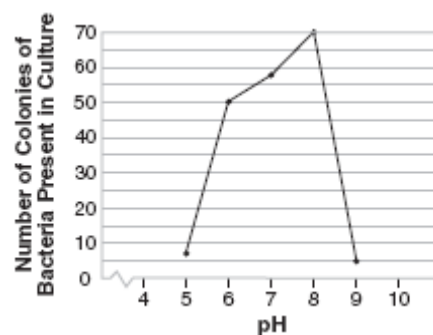


What is the range of this set of data?

- [A] $2.5 \leq y \leq 9.5$ [B] $0 \leq y \leq 100$
[C] $1 \leq x \leq 10$ [D] $2.5 \leq x \leq 9.5$

3. 010918b, P.I. A2.A.51

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

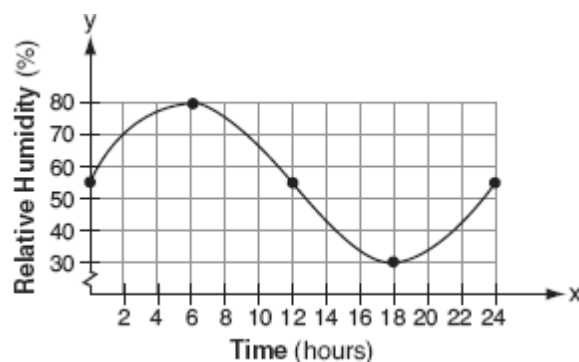


What is the range of this set of data?

- [A] $5 \leq y \leq 70$ [B] $5 \leq x \leq 9$
[C] $5 \leq x \leq 70$ [D] $0 \leq y \leq 70$

4. 080708b, P.I. A2.A.51

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



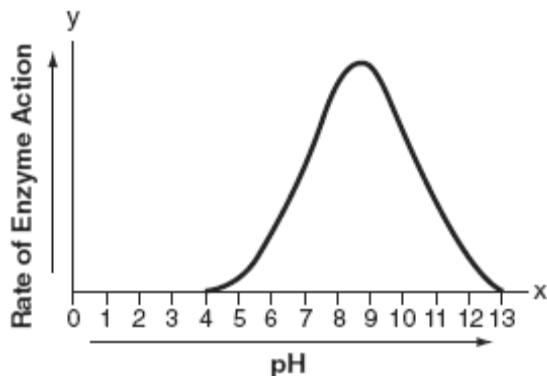
What is the range of this set of data?

- [A] $30 \leq x \leq 80$ [B] $0 \leq y \leq 24$
[C] $30 \leq y \leq 80$ [D] $0 \leq x \leq 24$

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5. 010602b, P.I. A2.A.51

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

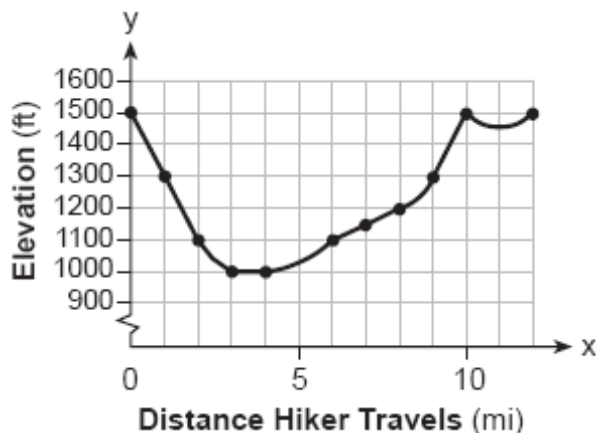


What is the domain of this function?

- [A] $y \geq 0$ [B] $x \geq 0$
 [C] $4 \leq y \leq 13$ [D] $4 \leq x \leq 13$

6. 060804b, P.I. A2.A.51

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?

- [A] $1,000 \leq x \leq 1,500$
 [B] $1,000 \leq y \leq 1,500$
 [C] $0 \leq x \leq 12$ [D] $0 \leq y \leq 12$

7. 080204b, P.I. A2.A.39

What is the domain of $f(x) = 2^x$?

- [A] all real numbers [B] $x \leq 0$
 [C] all integers [D] $x \geq 0$

8. 010218b, P.I. A2.A.39

What is the domain of $h(x) = \sqrt{x^2 - 4x - 5}$?

- [A] $\{x \mid x \geq 1 \text{ or } x \leq -5\}$
 [B] $\{x \mid -5 \leq x \leq 1\}$
 [C] $\{x \mid x \geq 5 \text{ or } x \leq -1\}$
 [D] $\{x \mid -1 \leq x \leq 5\}$

9. 060407b, P.I. A2.A.39

What is the domain of the function

$$f(x) = \frac{2x^2}{x^2 - 9}$$

- [A] all real numbers except 0
 [B] all real numbers
 [C] all real numbers except 3 and -3
 [D] all real numbers except 3

10. 010504b, P.I. A2.A.39

What is the domain of the function

$$f(x) = \frac{3x^2}{x^2 - 49}$$

- [A] $\{x \mid x \in \text{real numbers}\}$
 [B] $\{x \mid x \in \text{real numbers}, x \neq 0\}$
 [C] $\{x \mid x \in \text{real numbers}, x \neq \pm 7\}$
 [D] $\{x \mid x \in \text{real numbers}, x \neq 7\}$

11. 010314b, P.I. A2.A.39

If $f(x) = \frac{1}{\sqrt{2x-4}}$, the domain of $f(x)$ is

- [A] $x = 2$ [B] $x \geq 2$
 [C] $x > 2$ [D] $x < 2$

- [1] C _____
- [2] B _____
- [3] A _____
- [4] C _____
- [5] D _____
- [6] C _____
- [7] A _____
- [8] C _____
- [9] C _____
- [10] C _____
- [11] C _____