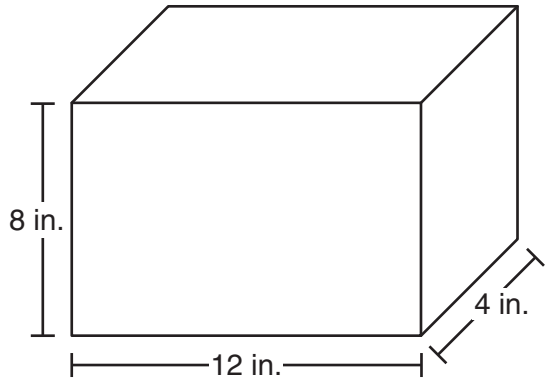
5 Look at this rectangular prism.



What could be the dimensions of a rectangular prism that is similar to this rectangular prism?

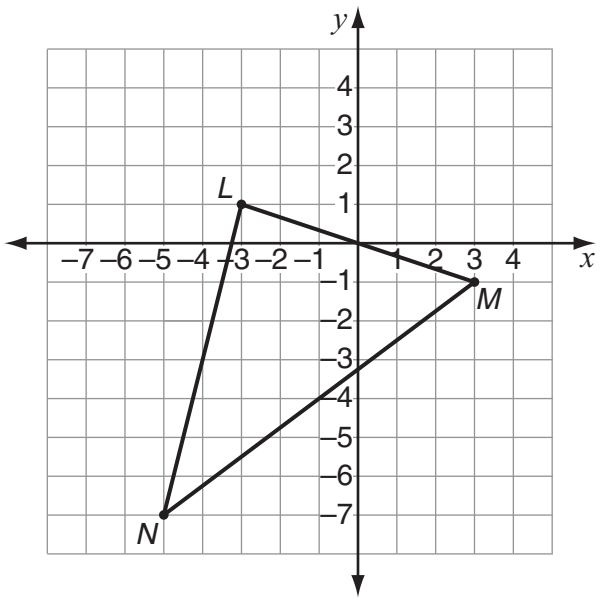
A. 6 in., 2 in., 1 in.

B. 9 in., 6 in., 3 in.

C. 15 in., 11 in., 7 in.

D. 24 in., 8 in., 4 in.

6 Look at ΔLMN on this grid.



What is the length, in units, of $\overline{MN}$?

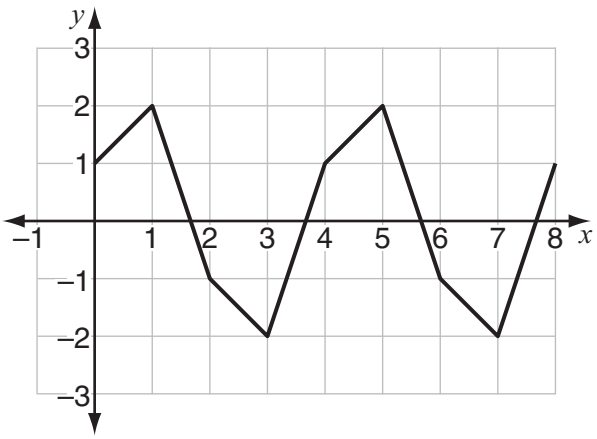
A. 6

B. 8

C. 9

D. 10

7 Look at this function.



As the value of x increases, the y-values form a repeating pattern. If this pattern continues, what is the y-value when $x = 26$?

A. –2
B. –1
C. 1
D. 2

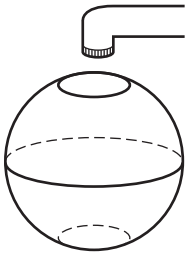
8 A guitar manufacturer uses a computer-controlled machine to make electric guitars. The table below shows the total number of guitars made after 2, 4, 8, and 16 hours.

Hours (h)	Total Number of Guitars Made (g)
2	18
4	42
8	90
16	186

If g represents the total number of guitars made after h hours, which equation represents the pattern shown in the table?

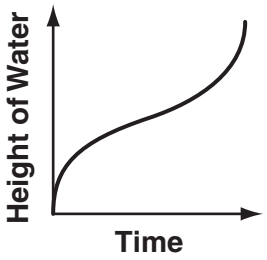
A. $g = 12h - 6$
B. $g = 12h$
C. $g = 3h^2 - 6$
D. $g = 3h^2 + 6$

9 Look at this container.

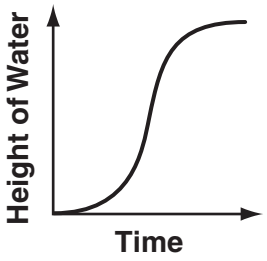


Water flows into this container at a constant rate. Which graph could represent the height of the water in the container over time?

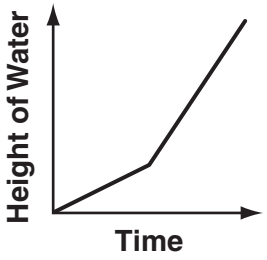
A.



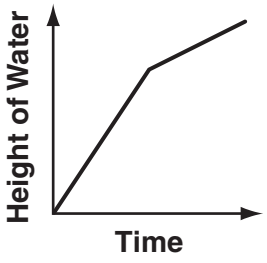
B.



C.



D.



10 What is the range of the function $f(x) = x^2 + 3$ if the domain is $\{-3, 0, 3\}$?

A. $\{3, 12\}$

B. $\{-6, 3, 12\}$

C. all real numbers

D. all real numbers greater than or equal to 3

11 The typical wingspan of the little blue heron is 4 inches more than half the typical wingspan of the great blue heron. If g represents the typical wingspan of the great blue heron, which expression represents the typical wingspan of the little blue heron?

A. $4\left(\frac{1}{2}g\right)$

B. $\frac{1}{2}g + 4$

C. $2g + 4$

D. $\frac{1}{2}(g + 4)$

12 The sum of three consecutive odd integers is 21. If x is the least of these odd integers, which equation **must** be true?

A. $3x = 21$

B. $3x + 3 = 21$

C. $3x + 4 = 21$

D. $3x + 6 = 21$

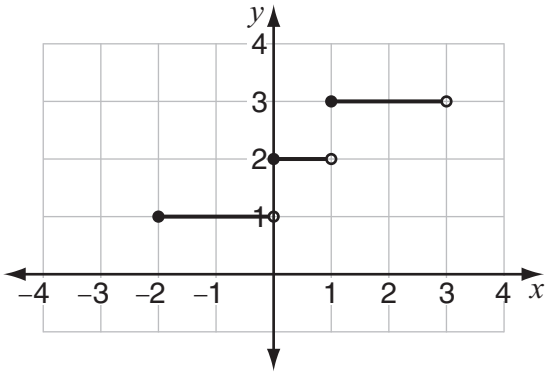
13 Look at this inequality.

$$|x + 5| \leq 2$$

List all **integer** values of x that make the inequality true.

14 A square with a side length of 8.0 cm is rolled up, without overlap, to form the lateral surface of a cylinder. What is the radius of the cylinder to the nearest tenth of a centimeter?

15 Look at this graph of a function.



What is the range of this function?