STAAR Released Item	Drag and Drop

A.6(A) 2019 item 50
[Describing Quadratic Functions]

What are the domain and range of $g(x) = -\frac{1}{4}(x - 17)^2 + 61$?

F Domain: All real numbers
Range: $g(x) \leq 61$

G Domain: $x \leq 17$
Range: $g(x) \leq 61$

H Domain: All real numbers
Range: $x \leq 17$

J Domain: $g(x) \geq 61$
Range: $x \leq 17$

What are the domain and range of $g(x) = -\frac{1}{4}(x - 17)^2 + 61$?

Move the correct answer to each box. Not all answers will be used.

Domain: [ ]

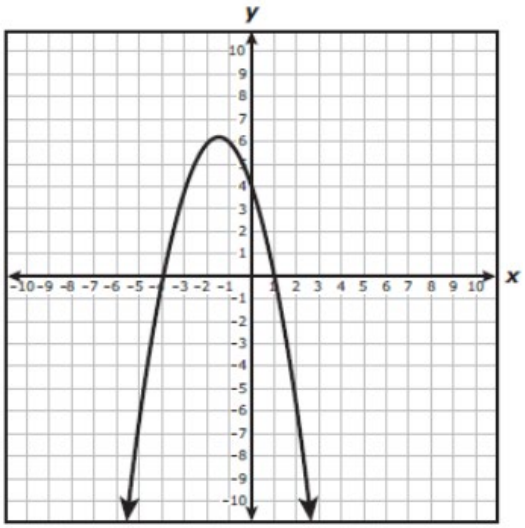
Range: [ ]

$g(x) \leq 61$	$g(x) \geq 61$	$x \leq 17$	All real numbers

STAAR Released Item

A.6(C) 2017 item 10
[Writing and Solving Quadratic Equations]

The graph of a quadratic function is shown on the grid.



Which function is best represented by this graph?

F $f(x) = x^2 + 3x - 4$

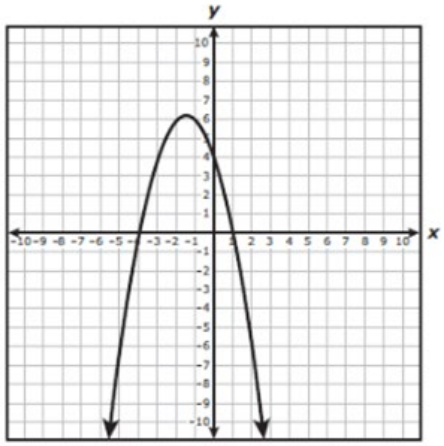
G $f(x) = -x^2 - 3x + 4$

H $f(x) = x^2 - 3x - 4$

J $f(x) = -x^2 + 3x + 4$

Equation Editor

The graph of a quadratic function is shown on the grid.



Write a function that can represent this graph.

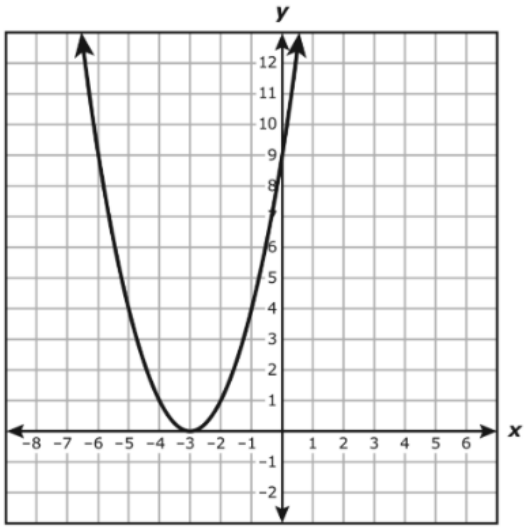
Enter your answer in the space provided.

f(x) =

STAAR Released Item

A.7(A) 2019 item 46
[Describing Quadratic Functions]

The graph of quadratic function k is shown on the grid.



Which statements are best supported by the graph of k?

I. The x-intercept is located at $(-3, 0)$.
II. The coordinates of the y-intercept are $(0, 9)$.
III. The axis of symmetry is $x = -3$.

F I and II only

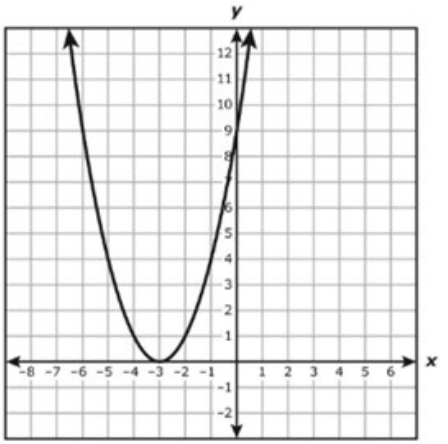
G I and III only

H II and III only

J I, II, and III

Multiselect

The graph of quadratic function k is shown on the grid.



Which statements are best supported by the graph of k?

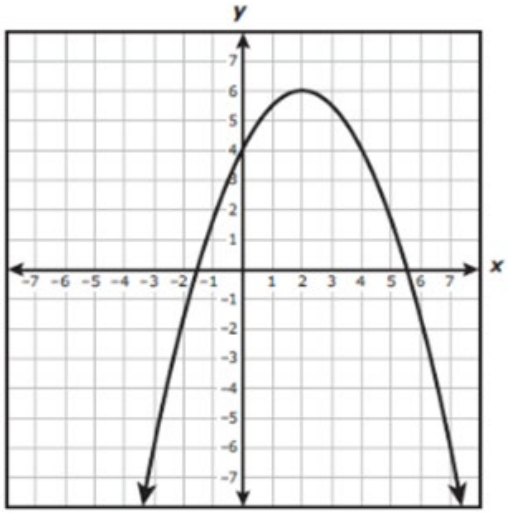
Select **TWO** correct answers.

☐ The x-intercept is located at $(0, -3)$.
☐ The coordinates of the y-intercept are $(0, 9)$.
☐ The axis of symmetry is $x = -3$.
☐ **The minimum is at (0,0).**

STAAR Released Item

A.7(A) 2017 item 46
[Describing Quadratic Functions]

The graph of a quadratic function is shown on the grid.



Which equation best represents the axis of symmetry?

F $y = 6$

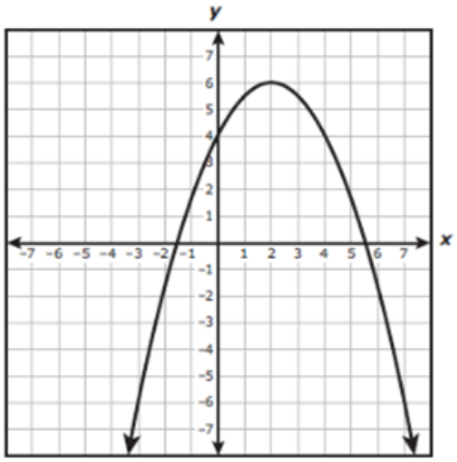
G $x = 2$

H $y = 4$

J $x = 0$

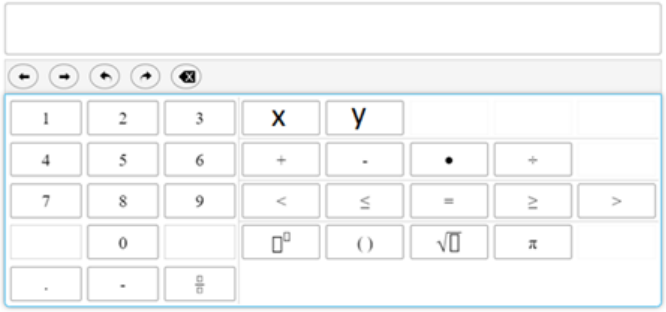
Multiselect

The graph of a quadratic function is shown on the grid.



Write an equation in equation in standard form that represents the axis of symmetry.

Enter your answer in the space provided.



Algebra I: Quadratic Functions
STAAR 2.0 Transitional Items

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STAAR Released Item

A.7(C) 2018 item 48
[Describing Quadratic Functions]

The graph of $g(x) = x^2$ was transformed to create the graph of $h(x) = -\left(\frac{x}{4}\right)^2$. Which of these describes the transformation from the graph of g to the graph of h?

F A reflection over the x-axis and a horizontal stretch

G A reflection over the y-axis and a horizontal stretch

H A reflection over the x-axis and a vertical stretch

J A reflection over the y-axis and a vertical stretch

Inline Choice

The graph of $g(x) = x^2$ was transformed to create the graph of $h(x) = -\left(\frac{x}{4}\right)^2$.

Complete the description of the transformation of graph of g to the graph of h.

Choose the correct answer from each drop-down menu to complete the description.

A reflection over the [ ] and a [ ] stretch

x-axis
y-axis

horizontal
vertical

STAAR Released Item

A.8(A) 2018 item 41
[Writing and Solving Quadratic Equations]

The area of a rectangular trampoline is 112 ft^2. The length of the trampoline is 6 ft greater than the width of the trampoline. This situation can be represented by the equation $w^2 + 6w - 112 = 0$.

What is the width of the trampoline in feet?

A 7 ft

B 16 ft

C 8 ft

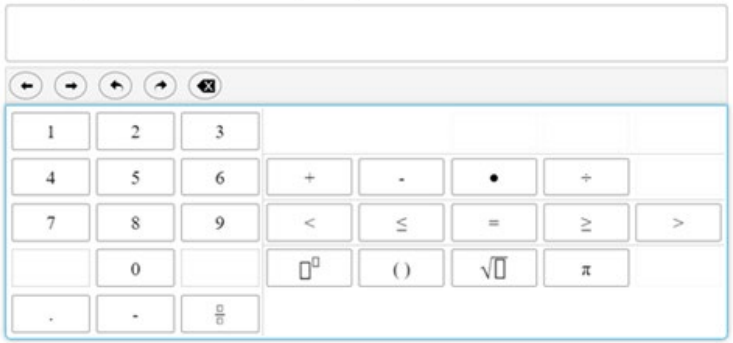
D 14 ft

Text Entry

The area of a rectangular trampoline is 112 ft^2. The length of the trampoline is 6 ft greater than the width of the trampoline. This situation can be represented by the equation $w^2 + 6w - 112 = 0$.

What is the width of the trampoline in feet?

Enter your answer in the space provided.



STAAR Released Item	Multiselect
A.8(A) 2016 item 29 [Writing and Solving Quadratic Equations] What are the solutions to $2(x-7)^2 = 32$? **A** $x = 7 \pm \sqrt{32}$ **B** $x = \pm \sqrt{65}$ **C** $x = 3$ and $x = 11$ **D** $x = -1$ and $x = 15$	What are the solutions to $2(x-7)^2 = 32$? Select **TWO** correct answers. ☐ $x = 7 \pm \sqrt{32}$ ☐ $x = \pm \sqrt{65}$ ☐ $x = -1$ ☐ $x = 3$ ☐ $x = 11$ ☐ $x = 15$