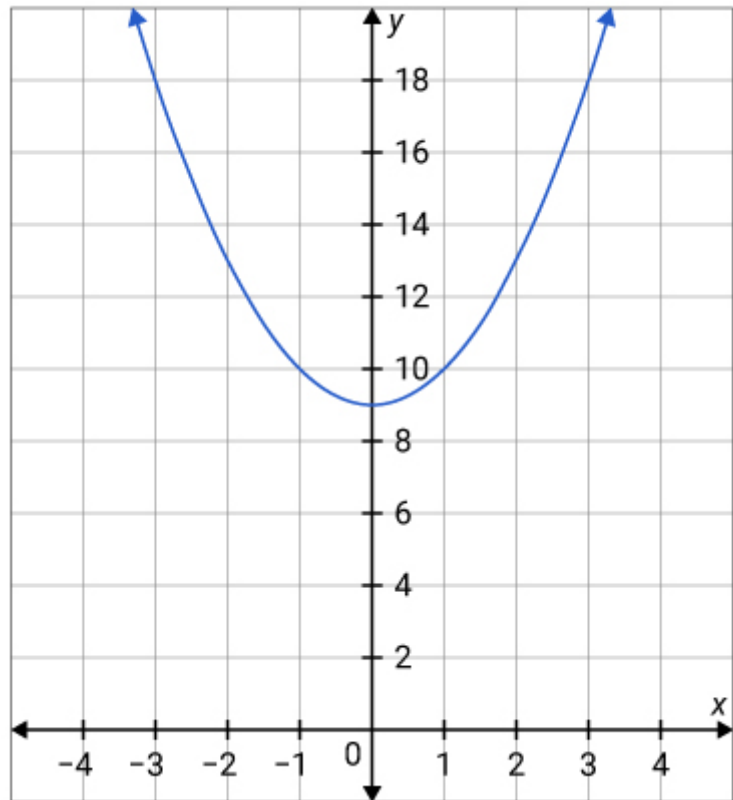


QUESTION 1



Write the equation for the function shown on this graph.
Enter your answer in the space provided. Use lowercase letters only.

$g(x) =$



$x^2 + 9$



QUESTION 2



What is the equation of the function

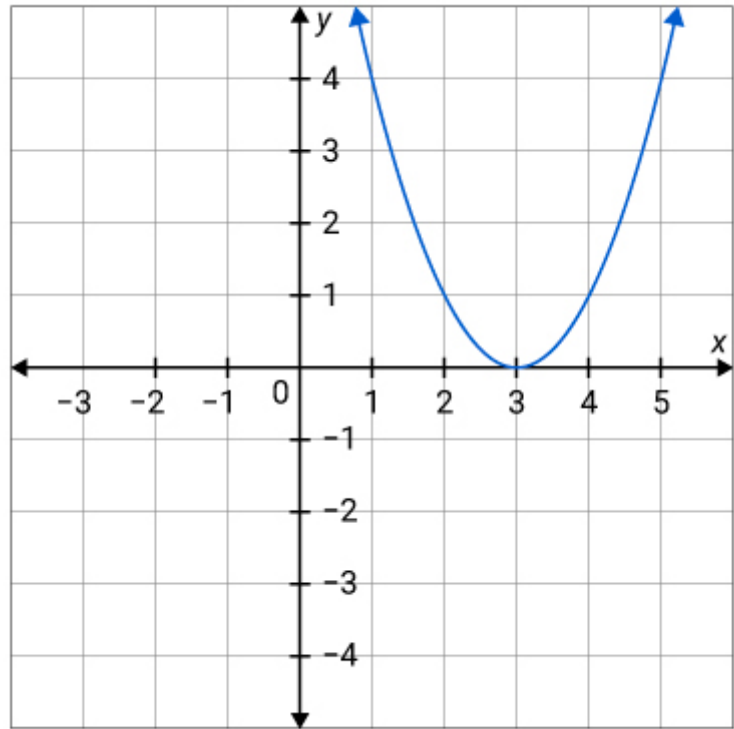
$f(x)$

shown on this graph?

Select the correct answer from the drop-down menu.

$f(x) =$

$(x - 3)^2$ ✓ ▼



QUESTION 3

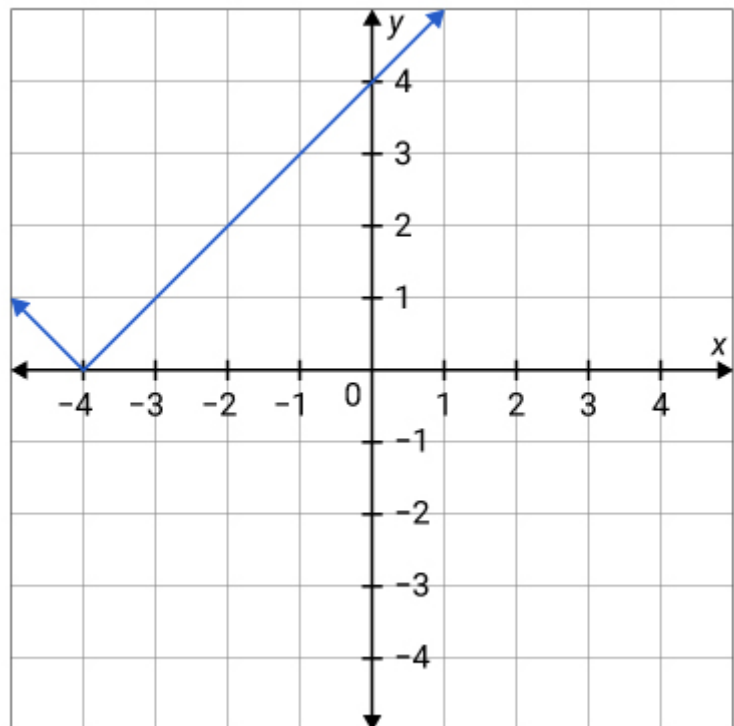


Determine the equation for the function shown on this graph.

Select the correct answer from the drop-down menu.

$f(x) =$

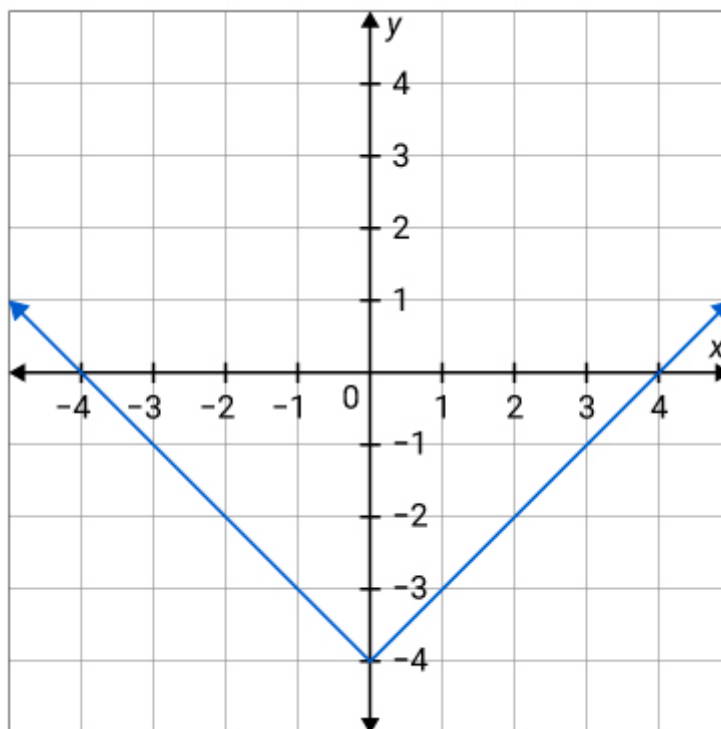
$|x + 4|$ ✓ ▼



QUESTION 4



Which equation represents the function shown on this graph?



☐ $f(x) = |x + 4|$

☐ $f(x) = |x| + 4$

☐ $f(x) = |x - 4|$

☒ $f(x) = |x| - 4$



QUESTION 5



Determine the equation that represents the function for this graph.

Drag and drop your answer to correctly complete the equation.

$$f(x) =$$

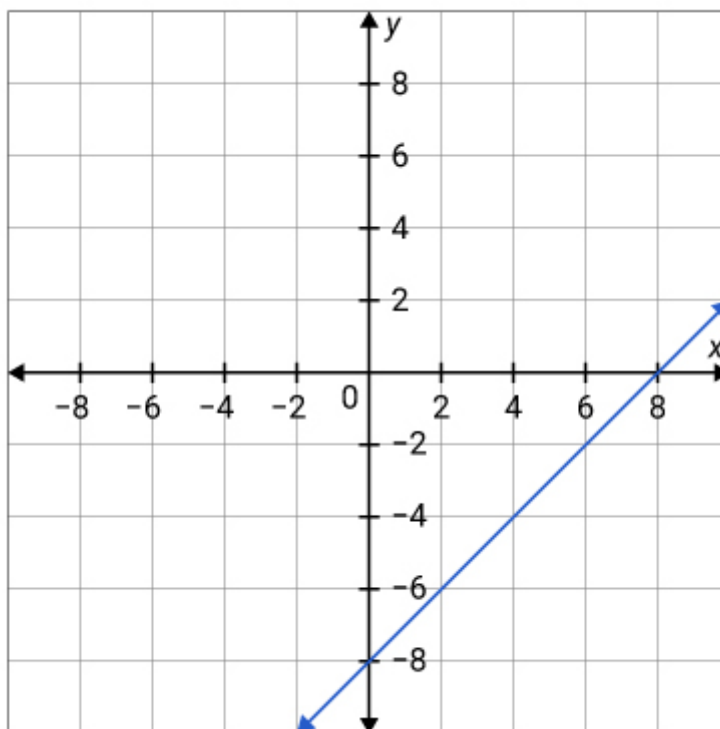
$$x - 8$$



$$x + 8$$

$$-8x$$

$$8x$$



QUESTION 6



Drag and drop your answer to correctly complete the sentence.

The function

$$g(x) = (x - 6)^2$$

is a translation of the graph of

$$f(x) = x^2$$

right 6 units



left 6 units

down 6 units

up 6 units

QUESTION 7



Select the correct answer from the drop-down menu.

$$f(x) = x^2 - 7$$

is part of the family of functions with the parent graph of

$$g(x) = x^2$$

.

The translation of

$$f(x) = x^2 - 7$$

moves the parent graph down 7 units ✓ ▼.

QUESTION 8



Select the correct answer from the drop-down menu.

The function

$$g(x) = |x| - 1$$

is part of the family of functions with the parent graph of

$$f(x) = |x|$$

.

The translation of

$$g(x) = |x| - 1$$

shifts the parent graph down 1 unit ✓ ▼.

QUESTION 9



The function

$$g(x) = |x + 5|$$

is a translation of the graph of

$$f(x) = |x|$$

.

Which statement describes this translation?



The graph of

$$f(x) = |x|$$

is translated 5 units down.



The graph of

$$f(x) = |x|$$

is translated 5 units up.



The graph of

$$f(x) = |x|$$

is translated 5 units to the left.



The graph of

$$f(x) = |x|$$

is translated 5 units to the right.

QUESTION 10



Drag and drop your answer to correctly complete the sentence.

The function

$$g(x) = x^2 + 3$$

is a translation of the graph of

$$f(x) = x^2$$

up 3 units



left 3 units

right 3 units

down 3 units

QUESTION 11



Select the correct answer from the drop-down menu.

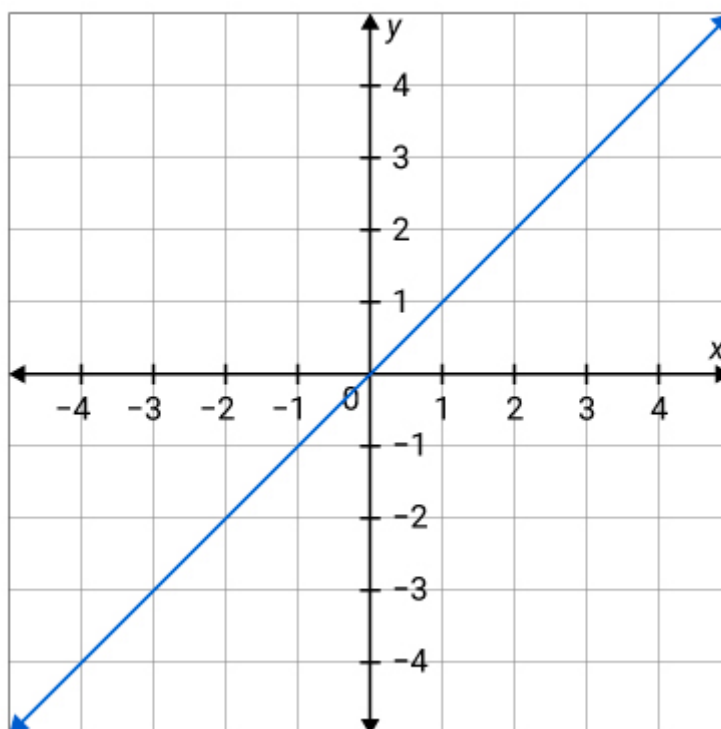
This graph is

a linear



parent

function.

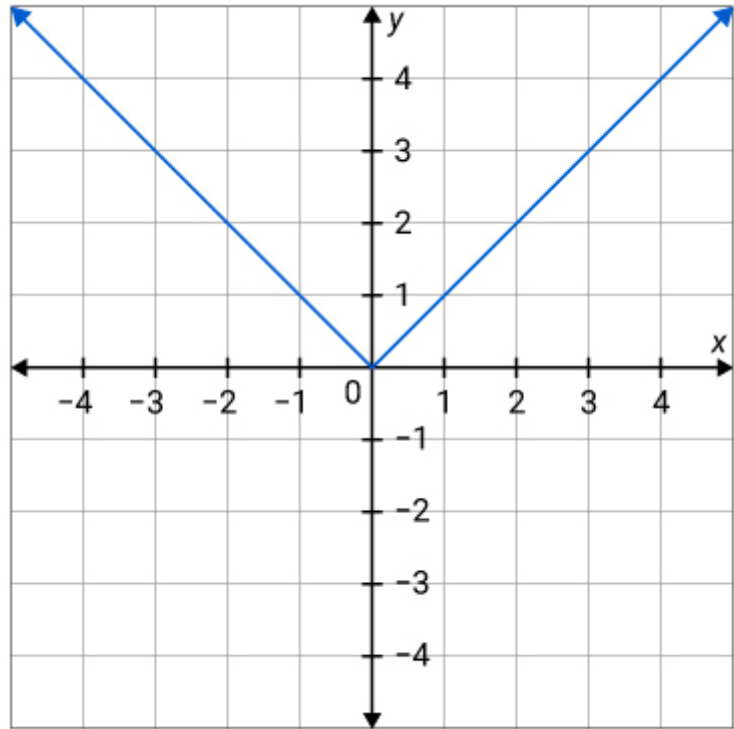


QUESTION 12



Select the correct answer from the drop-down menu.

This graph is



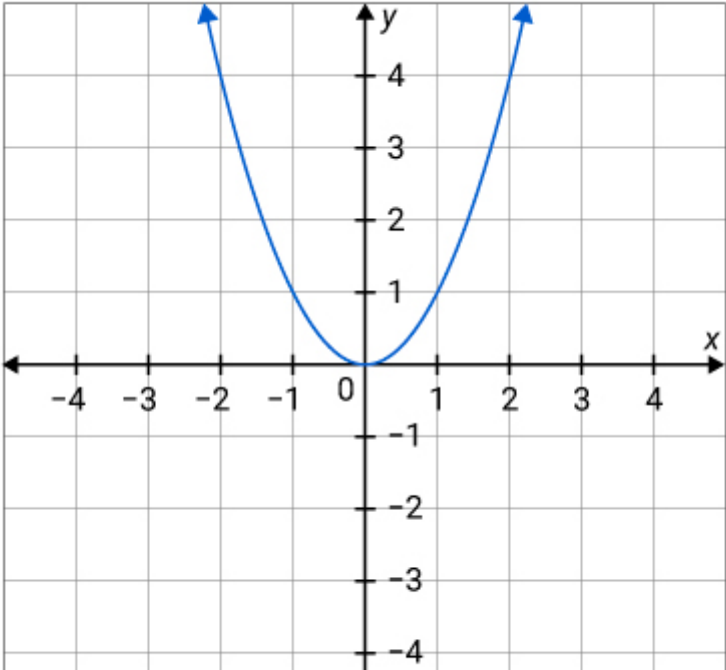
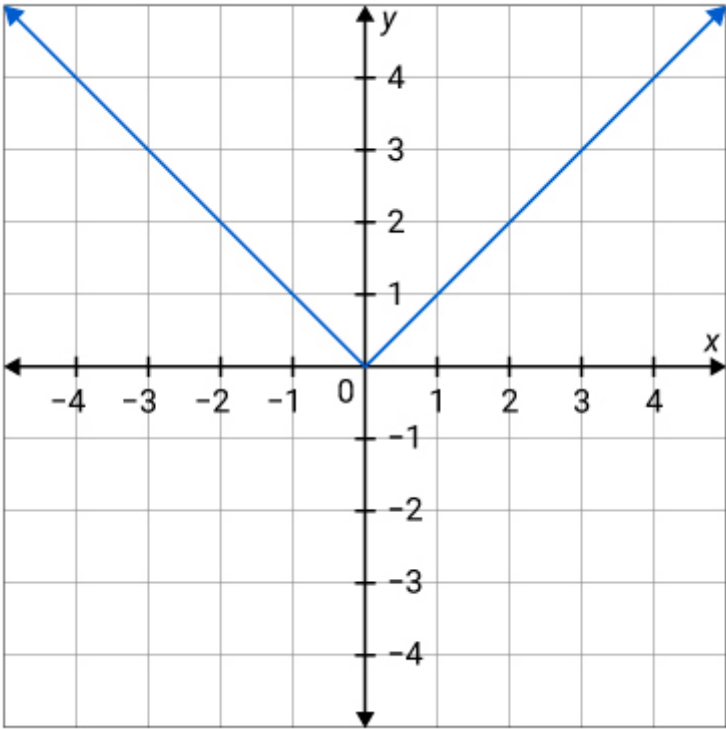
an absolute value ☒ ☐ parent function.

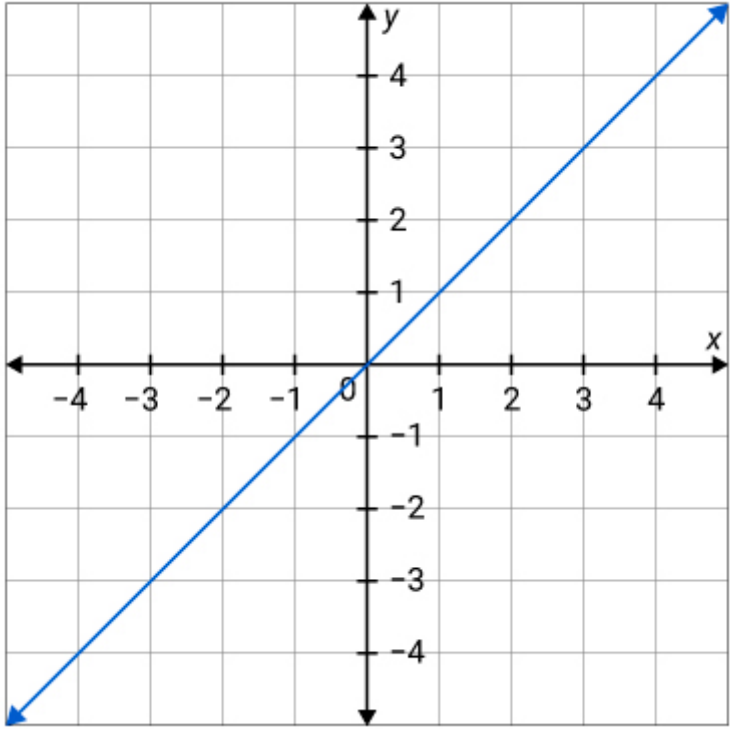
QUESTION 13

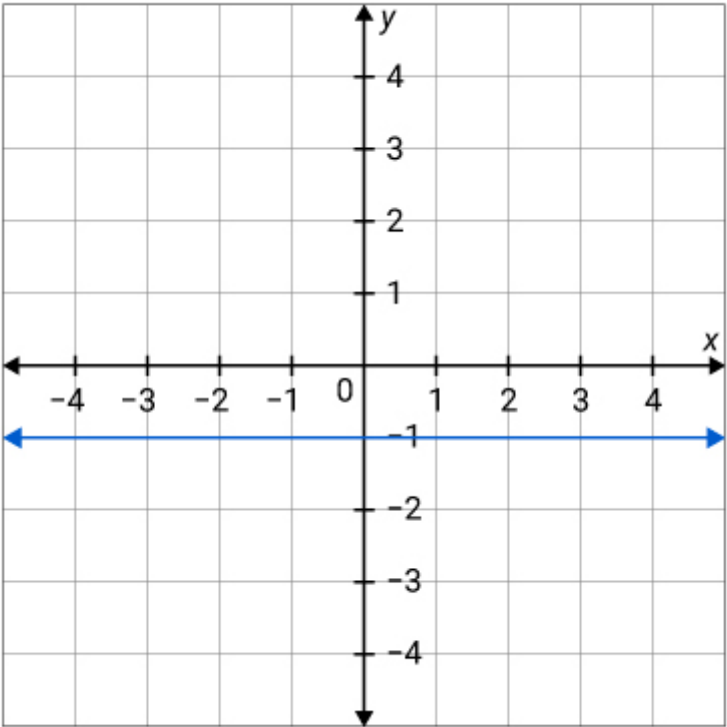
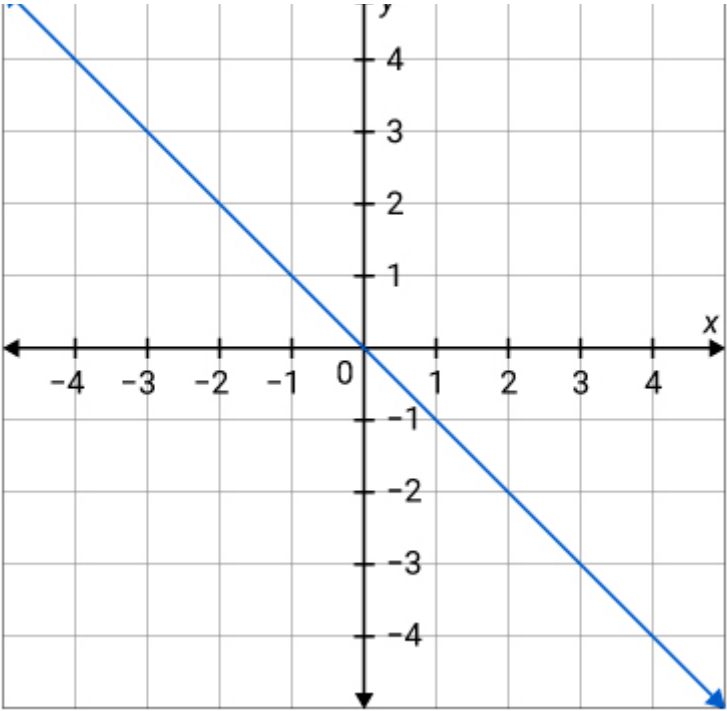


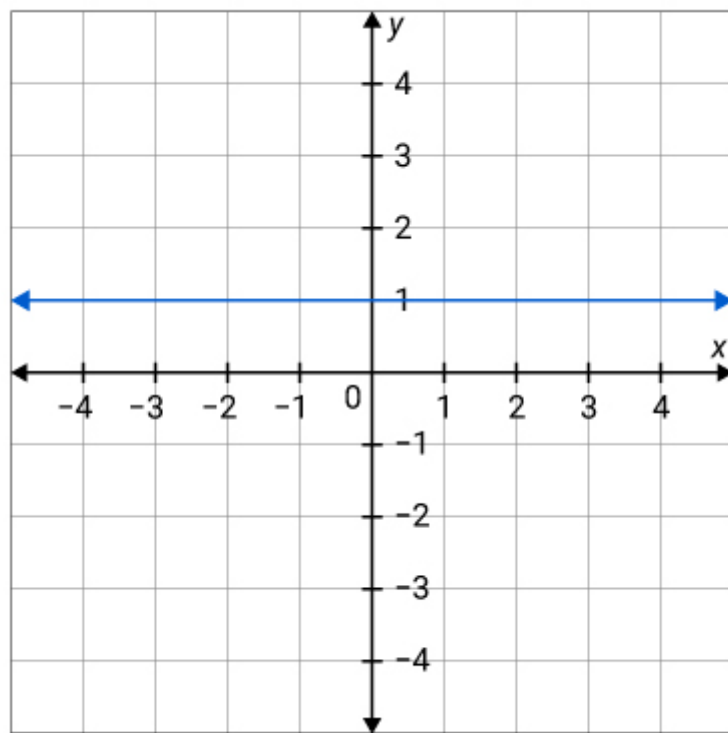
Which graphs are parent linear graphs?

Select all that apply.





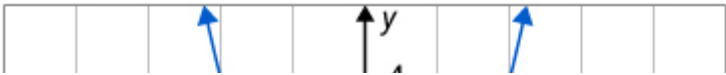
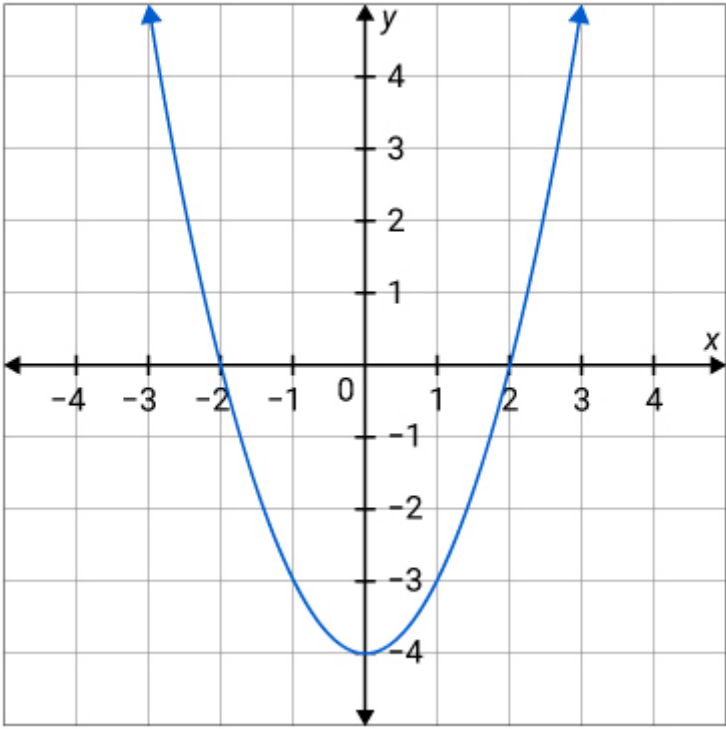
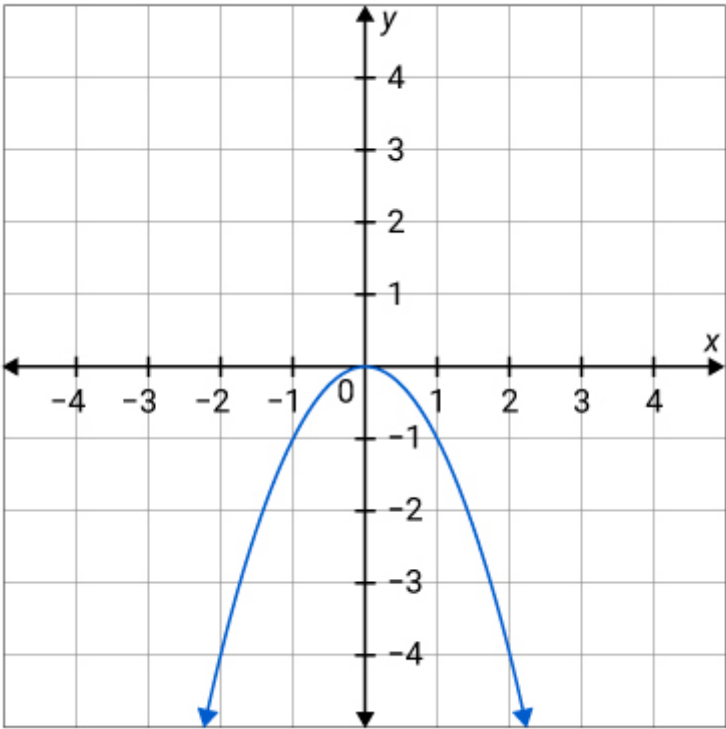


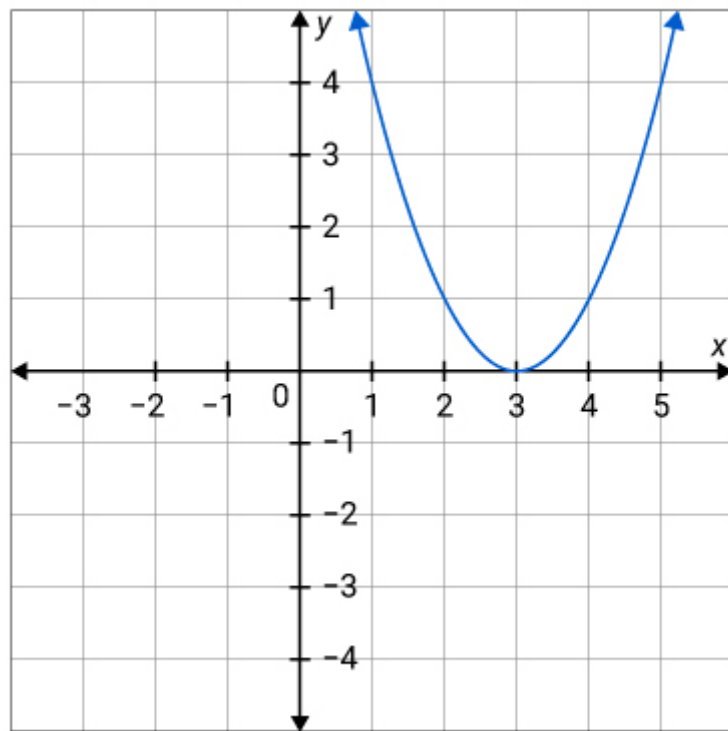
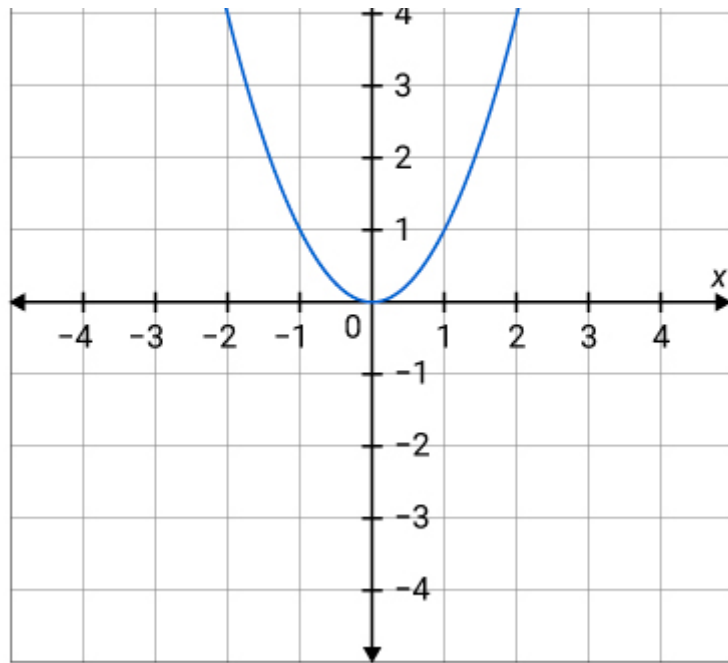


QUESTION 14

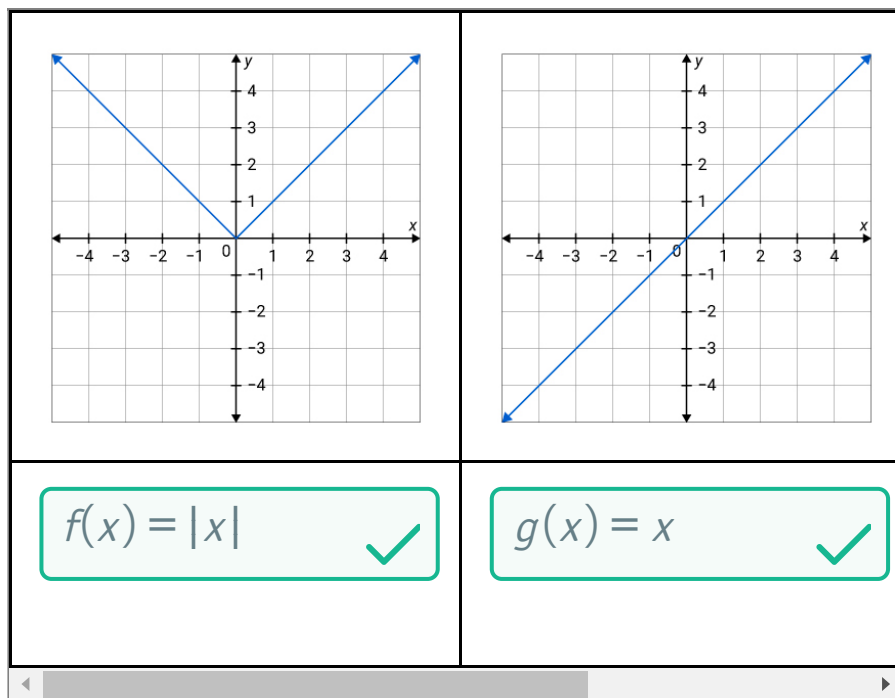


Which graph is the quadratic parent function?





Drag and drop each function to its graph.



$$r(x) = 1$$

$$s(x) = -1$$