



Review (4) you Alef

The graph of $f(x)$ is a line passing through $(1, 2)$ and $(5, 3)$. What is the equation for its inverse function $f^{-1}(x)$?

$f^{-1}(x) = -4x + 6$

$f^{-1}(x) = -4x + 9$

$f^{-1}(x) = 4x - 7$

$f^{-1}(x) = 4x - 2$

A cook needs 2 minutes to make a sandwich and 3 minutes to make a salad. Let x represent the number of sandwiches and y represent the number of salads.

Which inequality gives the possible numbers of each item that the cook could make in under 90 minutes?

$x + y < 90$

$2x + 3y < 90$

$x + 2 + y + 3 > 90$

$2x + 3y > 90$

Solve the system of equations.

$$y = -2x + 5$$

$$5x - 4y = 6$$

Choose the **best** method to solve the system of equations and the solution.

Select 2 choice(s)

$(-1, 7)$

elimination

$(2, 1)$

$(2, 9)$

substitution

$(1, 4)$

Solve the system of equations.

$$-8x + 11y = 39$$

$$2x - 3y = -9$$

$(9, 3)$

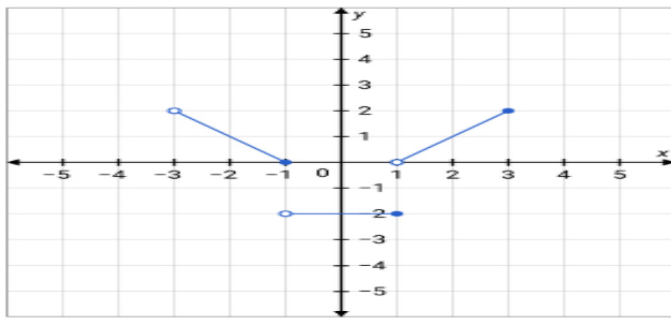
$(-9, -3)$

$(-3, -9)$

$(3, 9)$



A piecewise function is shown on the coordinate plane.



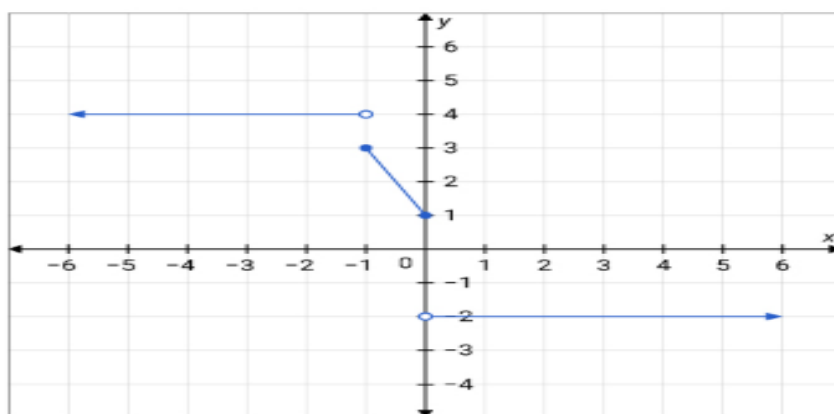
What is the domain and range of the piecewise function?

Drag and drop the correct values to complete the domain and ranges of the function.

D: { < x ≤ }

R: { -2 and ≤ y ≤ }

A piecewise function is shown on the coordinate plane.



Complete the equation for the piecewise function shown on the coordinate plane.

$$f(x) = \begin{cases} \boxed{a} & \text{if } x < -1 \\ -2x + 1 & \text{if } -1 \leq x \leq 0 \\ \boxed{b} & \text{if } x > 0 \end{cases}$$

Solve the inequality. Then complete the solution.

$$|4 + k| \leq 7$$

Enter your answers in the provided spaces.

Solution: {k | ≤ k ≤ }



Solve $12 < x - 6 \leq 27$.

Drag and drop the correct values to complete the solution set.

The solution set is $\{x | \text{ } < x \leq \text{ } \}$.

21

33

27

6

12

18

Which ordered pair belongs to the inverse of this relation?

$\{(1, 2), (3, 6), (5, 10), (7, 14), (8, 16)\}$

(8, 2)

(10, 5)

(1, 16)

(3, 6)

The graph of $f(x)$ is a line passing through (5, 3) and (7, 6). What is the equation for its inverse function $f^{-1}(x)$?

$f^{-1}(x) = \frac{3}{2}x - 9.5$

$f^{-1}(x) = \frac{3}{2}x + 0.5$

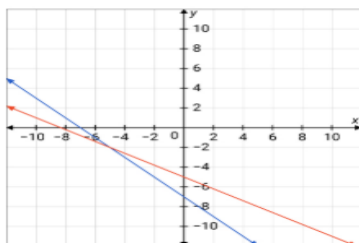
$f^{-1}(x) = \frac{2}{3}x - 7$

$f^{-1}(x) = \frac{2}{3}x + 3$

What is the solution to the system of equations?

$$y = -\frac{3}{5}x - 5$$

$$y = -x - 7$$



no solution

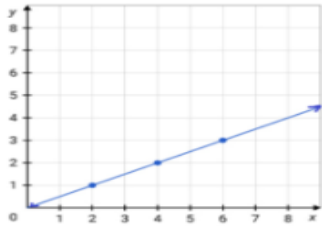
(-5, -2)

(0, -5)

infinitely many solutions



What is the equation in function notation for the graph shown on the coordinate grid?



$f(x) = 2x$

$f(x) = 2x + 1$

$f(x) = \frac{1}{2}x + 1$

$f(x) = \frac{1}{2}x$

Which ordered pair belongs to the inverse of this relation?
{(1, 2), (3, 6), (5, 10), (7, 14), (8, 16)}

(8, 2)

(10, 5)

(1, 16)

(3, 6)

Suppose y varies directly as x , and $y = -16$ when $x = -18$. What is the value of x when $y = 16$?

Enter your answer in the space provided.

$x =$

Solve the equation $a(m - 3n) = 5am + an - 4$ for m .

Mai took 3 friends out for dinner. The cost of the meals was AED 46.50. She left a 20% tip. What was the total cost including the tip?

AED 66.50

AED 9.30

AED 55.80

AED 26.50



What is the value of $\frac{2x^2 - 3y}{xy - 1}$ when $x = 2$ and $y = 1$?

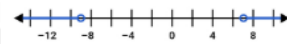
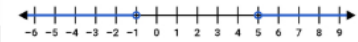
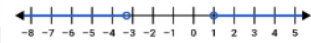
- | | |
|--------------------------|-------------------------|
| <input type="radio"/> 10 | <input type="radio"/> 5 |
| <input type="radio"/> 2 | <input type="radio"/> 4 |

Match each inequality to the graph of its solution.

$|6 + 6m| > 48$

$|-6x - 7| > 13$

$|2x - 4| > 6$



Evaluate $|x + 3| - 1$ for $x = 15$.

- | | |
|--------------------------|--------------------------|
| <input type="radio"/> 14 | <input type="radio"/> 19 |
| <input type="radio"/> 17 | <input type="radio"/> 18 |

A line with a slope of 4 passes through the points $(x, 5)$ and $(-1, -7)$.

What is the value of x ?

Drag and drop the correct answer into the box to complete the sentence.

The 16th term of the arithmetic sequence $-15, -28, -41, -54, -67$ is .

-223

-210

-195

-238



The solution set for the equation $|2x - 5| = 7$ is

Solve the proportion $\frac{a-1}{3} = \frac{2a-6}{10}$.

Solve.

$$\frac{4}{5} + m = 1\frac{7}{10}$$

Which ordered pair belongs to the inverse of this relation?

x	-1	0	1	2
y	5	0	-5	-10

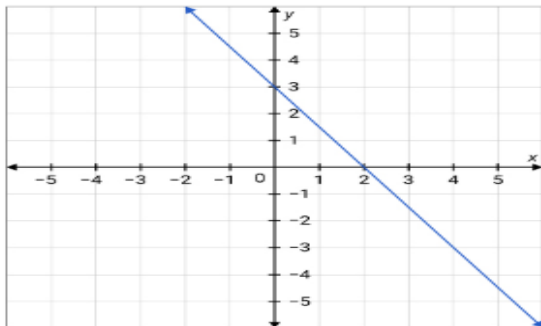
(5, -5)

(2, -10)

(-1, 1)

(-5, 1)

What is the zero of the function shown in the graph?



0

3

$-\frac{3}{2}$

2

The circumference of the mug shown is given by the product of two times πr and the radius of the mug.



Which formula describes this relationship? Use C for circumference and r for radius.

$C = \pi r^2$

$C = 2\left(\frac{\pi}{r}\right)$

$C = 2\pi r$

$C = 2\pi + r$