

5.1 Puzzle Time

What Asks No Questions But Must Be Answered?

Write the letter of each answer in the box containing the exercise number.

Tell whether the ordered pair is a solution of the system of linear equations.

1. $(-1, 6)$; $6x + 3y = 18$
 $2x + y = 7$
2. $(12, 0)$; $2x + 6y = 24$
 $\frac{1}{2}x + 3y = 6$
3. $(5, -8)$; $9x + 7y = -11$
 $-2x - 5y = 30$
4. $(16, 1)$; $y = -\frac{1}{4}x + 5$
 $y = \frac{1}{6}x - 2$

Solve the system of linear equations by graphing.

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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"> 5. $y = x + 1$
$y = -x - 1$ 7. $y = -\frac{2}{3}x + 2$
$y = \frac{1}{3}x + 5$ 9. $x + y = -5$
$-x + 2y = 5$ | <ol style="list-style-type: none"> 6. $y = -2x - 4$
$y = 3x + 1$ 8. $4x - y = 2$
$x - y = -1$ 10. $x + 2y = 12$
$x - 2y = -12$ |
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11. The perimeter of your closet is equal to 18 feet. The difference of the length and the width equals 1 foot. Write a system of linear equations which represent the perimeter of your closet in respect to its width (x -axis) and length (y -axis), and solve the system by graphing.

Answers

E. yes

L. no

O. $(-5, 0)$

R. $(-3, 4)$

D. $(4, 5)$

H. $(-1, 0)$

B. $(0, 6)$

T. $(1, 2)$

O. $(-1, -2)$

8	5	3		11	6	9	7	10	2	4	1
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5.2 Puzzle Time

Did You Hear About The Pig That Built Himself A Home?

A	B	C	D	E	F
G	H	I	J	K	L
M					

Complete each exercise. Find the answer in the answer column. Write the word under the answer in the box containing the exercise letter.

(-5, -4) IN	<p>Solve the system of linear equations by substitution. Check your solution.</p> <p>A. $3x + 2y = 12$ $y = x - 9$</p> <p>B. $4x + y = -2$ $y = 2x - 2$</p> <p>C. $-3x + 5y = 5$ $y = x - 1$</p> <p>D. $2x + y = -16$ $y = 2x$</p> <p>E. $7x = -35$ $-8x + 9y = 4$</p> <p>F. $-4x + 3y = 20$ $-14y = -56$</p> <p>G. $13x - 6y = -5$ $x + 10 = 11$</p> <p>H. $9x - 2y = 12$ $y + 4 = 16$</p> <p>I. $x = 6 + 2y$ $-3x + 14y = -18$</p> <p>J. $5x - 9y = 12$ $x + y = -6$</p> <p>K. $x - y = -8$ $6x + y = -6$</p> <p>L. $7x - 3y = 17$ $2x - y = 6$</p> <p>M. The physical education instructor asked each student to do a total of 36 pull-ups and push-ups in 1 minute. The instructor wanted students to do 8 times as many push-ups as pull-ups. Write a system of linear equations that represents this situation. How many pull-ups and push-ups were required in 1 minute?</p>	(5, 4) A
(0, 0) BRICK		(4, 12) AND
(6, 0) CALLED		(4, 32) TIE
(0, -2) MADE		(6, -3) HE
(1, 3) TAIL		(-2, 6) A
(-3, -3) IT		(-2, 4) HIS
(-4, -8) KNOT		(-1, -8) PIG'S
(8, 8) THREE		(12, 0) NAILS
(7, 2) WOOD		(0, 15) YARD