CRYPTIC QUIZ

1. Why did the little girl paint spots on the staircase?

Answer:

14 7 4 3 11 14 11 14 15 4 1 9 2 15 15 4 12

2. What do you call a thirty-six-inch two-by-four?

Answer:

11 10 6 13 8 4 12 5 11 12 9

Solve each equation for y in terms of x. Find your answer below and notice the letter next to it. Each time the exercise number appears in the code, write this letter above it.



(1) $x + y = 5$	6 -x + 2y = 6	(1) $3x + 2y - 6 = 0$
(2) $-3x + y = -2$	(7) x − 2y = 2	(12) $x - 4y + 2 = 0$
(3) x - y = 7	(8) -2x + 3y = -12	$(13) -2\mathbf{x} - 6\mathbf{y} = 0$
$(4) -4\mathbf{x} - \mathbf{y} = 1$	9 5x + 2y = 1	14 8y - 3x = -6
5 $3x - y = -10$	(10) 4 x - 3 y = -2	(15) $7x = 2y$
Answers:	Answers:	Answers:
(E) y = -4x - 1	(D) $y = -\frac{5}{2}x + \frac{1}{2}$	$(N) \mathbf{y} = \frac{4}{3}\mathbf{x} + \frac{1}{4}$
(F) $y = 3x - 1$	$(\bigcup \ \mathbf{y} = \frac{1}{2}\mathbf{x} + 3$	$ (S) y = \frac{3}{8}x - \frac{3}{4} $
$\bigcirc y = -x + 5$	$\frac{1}{3}$ (L) $y = \frac{4}{3}x + \frac{2}{3}$	$(\mathbf{R}) \mathbf{y} = \frac{1}{4}\mathbf{x} + \frac{1}{2}$
$(\forall y = x - 7)$	$ (G) \mathbf{y} = \frac{3}{4}\mathbf{x} - 4 $	
$(\mathbf{Y}) \mathbf{y} = 3\mathbf{x} + 10$	$(H) y = \frac{1}{2}x - 1$	$(T) y = \frac{7}{2}x$
$\bigcirc y = 3x - 2$	$ (B) y = \frac{2}{3}x - 4 $	$(M) \mathbf{y} = -\frac{1}{3}\mathbf{x}$
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OBJECTIVE 5-d: To solve an equation for y in terms of x.

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Two-step equations

To solve equations with two operations, it takes two steps to isolate the variable.

Example: Solve: 2n - 8 = 24

Solution:

Step 1: As a first step in isolating the variable, add 8 to both sides of the equation.

$$2n - 8 + 8 = 24 + 8$$

 $2n = 32$

Step 2: Finish isolating the variable by dividing each side of the equation by 2.

$$\frac{2n}{2} = \frac{32}{2}$$
$$n = 16$$

Step 3: Check by replacing the variable with its value in the equation.

2n - 8 = 24 $(2 \times 16) - 8 = 24$ 32 - 8 = 2424 = 24

PRACTICE

Solve each equation. Check your solution.

1. 2*y* + 9 = 15 _____

2.	3r - 6 = 18	
	A. 6	C. 16
	B. 8	D. 24

3. If 33.4 = 6.76 + 9n, what is the value of n?

4. If $(\frac{5}{23})(t) = 20$, what is the value of *t*?

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