

Algebra Drill

You can check your answers in Part VIII: Answer Key to Drills.

- If $5x + 9 = 44$, then $x =$
 - 12
 - 10
 - 7
 - 6
- Laura has \$4 more than three times the amount of money Steven has. If x represents the amount of money Steven has, which expression shows how much money Laura has?
 - $3x + 4$
 - $3x - 4$
 - $4x + 3$
 - $x + 4(3)$
- Evaluate $5x^2 - 4y$, if $x = 3$ and $y = 4$.
- The Oakdale Preschool accepts 4-year-olds and 5-year-olds and has a total of 63 students. If the school has 7 more 4-year-olds than 5-year-olds, then how many of the children are 4 years old?
 - 14
 - 28
 - 35
 - 42
- If $3m + 7 < 28$, then which of the following expressions gives all the possible values of m ?
 - $m < 9$
 - $m < 7$
 - $m > -5$
 - $m > -7$
- What is the sum of $2(x + y) + 3x + 2y$?
 - $5x + 3y$
 - $6x + 3y$
 - $6x + 4y$
 - $5x + 4y$
- If $p = 4$, which of the following inequalities contains the number p ?
 - $x < 4$
 - $x > 5$
 - $2x < 3$
 - $x < 5$
- If 36 of the 120 workers in a factory work overtime, what percentage of the workers work overtime?
 - 10%
 - 20%
 - 30%
 - 40%

9. Multiply.

$$(4x - 8)(x + 2)$$

- A. $4x^2 - 16$
- B. $-4x + 2$
- C. $4x^2 + 16x - 16$
- D. $5x - 6$

10. Tony is 4 years older than Heather, and Heather is 5 years younger than Larry. If the sum of their ages is 69, how old is Tony?

- A. 18
- B. 20
- C. 24
- D. 25

11. If $3x + 2 = -2y$ and $-x + 3y = -14$, what is the value of y ?

- A. -4
- B. -2
- C. 2
- D. 4

x	$f(x)$
-2	
1	3
	19

12. If the table above represents the function $f(x) = 2x^2 + 1$, select possible values to complete the table.

5	17
-3	19
9	-1

13. If $\frac{-2x+8}{x^2-3x-10} \times \frac{x^2-x-20}{x^2-16} = x+5$, which of the following is a possible value of x ?

- A. -4
- B. -2
- C. 3
- D. 5