

Algebra Quiz PDF

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What is the result of $2x + 3x$?

- $5x^2$
- $5x$
- $6x$
- 5

Solve for x : $x + 5 = 12$.

- 5
- 6
- 7
- 8

Explain why a variable is used in algebraic expressions.

Describe the process of solving a linear equation with one variable.

How do you determine if a relation is a function?

Describe how to simplify a complex rational expression.

Explain the process of rationalizing the denominator of a radical expression.

Which of the following are solutions to the inequality $x - 2 > 3$?

- 4
- 5

6 7

What is the value of $\log_{10} 1000$?

 1 2 3 10

What is $\sqrt{64}$?

 6 7 8 9

What is the degree of the polynomial $3x^4 + 2x^2 - x + 5$?

 1 2 3 4

Simplify $(x^2 - 4)/(x - 2)$.

 $x + 2$ $x - 2$ $x^2 - 4$ 1

Which of the following can be factored from $x^2 - 16$?

 $x + 4$ $x - 4$ $x^2 + 16$ $x^2 - 4$

Which of the following are true for $\log_b(mn)$?

- $\log_b m + \log_b n$
- $\log_b m \cdot \log_b n$
- $\log_b m - \log_b n$
- $\log_b (m+n)$

Which of the following are true about the function $f(x) = 3x + 4$?

- It is a linear function.
- The slope is 3.
- The y-intercept is 4.
- It is a quadratic function.

Which of the following are equivalent to $(1/x) + (1/y)$?

- $(x+y)/(xy)$
- $(y+x)/(xy)$
- $(1/xy)$
- $(x-y)/(xy)$

Explain the process of factoring a quadratic polynomial.

Which of the following is a variable?

- 7
- y
- 12
- 3.14

What is the range of the function $f(x) = x^2$ for x in the set of all real numbers?

- All real numbers
- Non-negative real numbers
- Positive real numbers

Negative real numbers

Which of the following are equivalent to $x^2 \cdot x^3$?

- x^5
- x^6
- x^{2+3}
- x^8