

Evaluating Expressions Worksheet

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Part 1: Building a Foundation

Which of the following is an example of an algebraic expression?
Hint: Think about what includes variables and constants.
○ 5 + 7
○ x + 3
○ 9 - 2○ 12
Which of the following is an example of an algebraic expression?
Hint: Think about expressions that include variables.
○ A) 5 + 7
○ B) x + 3
○ C) 9 - 2 ○ D) 12
(D) 12
Which of the following is an example of an algebraic expression?
Hint: Think about expressions that include variables.
○ A) 5 + 7
○ B) x + 3
○ C) 9 - 2
O) 12
Which components can be found in an algebraic expression? (Select all that apply)
Hint: Consider the elements that make up an expression.
☐ Variables

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☐ Coefficients ☐ Constants ☐ Equations
Which components can be found in an algebraic expression? (Select all that apply)
Hint: Consider the elements that make up expressions.
□ A) Variables□ B) Coefficients□ C) Constants□ D) Equations
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Hint: Consider the elements that make up an expression.
□ A) Variables□ B) Coefficients□ C) Constants□ D) Equations
Define what a variable is in the context of an algebraic expression.
Hint: Think about what a variable represents in mathematics.

Define what a variable is in the context of an algebraic expression.

Hint: Think about how variables are used in expressions.



Define what a variable is in the context of an algebraic expression.	
Hint: Think about how variables are used in expressions.	
List the steps of the order of operations using the acronym PEMDA	AS.
Hint: Remember the order in which operations should be performed.	
1. What does P stand for?	
1. What does I Stand for:	
2. What does E stand for?	
3. What does M stand for?	
In the expression $4x + 7$, what is the coefficient of x ?	
Hint: Identify the number that is multiplied by the variable.	
○ 4○ 7	
○ x	
O 11	

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In the expression $4x + 7$, what is the coefficient of x ?
Hint: Identify the number that multiplies the variable.
○ A) 4
○ B) 7
○ C) x
○ D) 11
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Hint: Identify the number that multiplies the variable.
○ A) 4
○ B) 7
○ C) x
OD) 11
Part 2: Application and Analysis
What is the result of evaluating the expression $3 + 6 \times (5 + 4) \div 3 - 7$?
Hint: Follow the order of operations carefully.
O 11
○ 11○ 14
○ 14○ 16
○ 14
○ 14○ 16
○ 14○ 16○ 19
 14 16 19 What is the result of evaluating the expression 3 + 6 × (5 + 4) ÷ 3 - 7?
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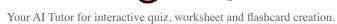
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Hint: Follow the order of operations carefully.

○ A) 11○ B) 14○ C) 16○ D) 19
If $x = 3$ and $y = 2$, what is the value of the expression $2x + 3y$?
Hint: Substitute the values of x and y into the expression. 12 13 14 15
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○ A) 12○ B) 13○ C) 14○ D) 15
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Hint: Substitute the values of x and y into the expression.
○ A) 12○ B) 13○ C) 14○ D) 15
Which of the following expressions is equivalent to 2(x + 3) - 4?
Hint: Distribute and simplify the expression. 2x + 2 2x + 6 - 4 2x + 8 2x + 3

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Hint: Distribute and simplify the expression.





○ A) 2x + 2
○ B) 2x + 6 - 4
○ C) 2x + 8
○ D) 2x + 3
Which of the following expressions is equivalent to $2(x + 3) - 4$?
Hint: Distribute and simplify the expression.
○ A) 2x + 2
○ B) 2x + 6 - 4
○ C) 2x + 8
○ D) 2x + 3
Analyze the expression $3(x - 2) + 4x$. Which of the following are correct simplifications? (Select all that apply)
Hint: Distribute and combine like terms.
3x - 6 + 4x
7x - 6
3x + 4x - 6
3x - 2 + 4x
Analyze the expression $3(x - 2) + 4x$. Which of the following are correct simplifications? (Select all that apply)
Hint: Look for equivalent forms of the expression.
A) 3x - 6 + 4x
☐ B) 7x - 6
\Box C) 3x + 4x - 6
D) 3x - 2 + 4x
Analyze the expression $3(x - 2) + 4x$. Which of the following are correct simplifications? (Select all that apply)
Hint: Look for equivalent forms of the expression.
☐ A) 3x - 6 + 4x
☐ B) 7x - 6
C) 3x + 4x - 6
$\bigcap D : S_{X} = 2 + 4x$

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Part 3: Evaluation and Creation

Which expression represents the perimeter of a rectangle with length I and width w?
Hint: Think about the formula for perimeter.
○ 2I + 2w○ I + w○ 2(I + w)
○ lw
Which expression represents the perimeter of a rectangle with length I and width w?
Hint: Consider the formula for perimeter.
 A) 2I + 2w B) I + w C) 2(I + w) D) Iw
Which expression represents the perimeter of a rectangle with length I and width w?
Hint: Think about how to calculate the perimeter.
○ A) 2l + 2w
○ B) I + w
○ C) 2(I + w)○ D) Iw
Create an expression that represents the total cost of buying x apples at \$2 each and y oranges at \$3 each. Explain your reasoning.
Hint: Consider how to represent costs in an expression.





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int: Think about how to represent costs in an expression.
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int: Consider how to represent costs in an expression.
eflect on how understanding expressions and their evaluation can be useful in everyday life. vovide an example to support your reflection.
int: Consider practical applications of algebra in daily activities.

Reflect on how understanding expressions and their evaluation can be useful in everyday life. Provide an example to support your reflection.

Hint: Consider practical applications of algebraic expressions.



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	rstanding expression to support your reflec	uation can be useful i	n everyday life.	
-	applications of algebra in			