

Name _____

Reteaching

8-2

Order of Operations

If you do not use the proper order of operations, you will not get the correct answer.

EXAMPLE

NT1 Day 4

*5.OA.1
5.OA.2*

5.OA.3

Evaluate $2^3 \div 2 + 3 \times 6 - (1 \times 5)$.

Step 1. Do the operations inside the parentheses.

$$(1 \times 5) = 5$$

$$2^3 \div 2 + 3 \times 6 - 5$$

Step 2. Evaluate any terms with exponents.

$$2^3 = 8$$

$$8 \div 2 + 3 \times 6 - 5$$

Step 3. Multiply and divide in order from left to right.

$$8 \div 2 = 4 \text{ and } 3 \times 6 = 18$$

$$4 + 18 - 5$$

Step 4. Add and subtract in order from left to right.

$$4 + 18 = 22$$

$$22 - 5 = 17$$

$$\text{So, } 2^3 \div 2 + 3 \times 6 - (1 \times 5) = 17$$

Write which operation should be done first.

1. $6 + 3 \times 2$ _____

2. $13 - 1 + 4 \div 2$ _____

3. $5 \times (7 - 2) + 1$ _____

4. $(19 + 23) - (4 \times 5)$ _____

For questions 5 through 8, evaluate the expression for $x = 6$ and $y = 17$.

5. $4x + 5y$ _____

6. $2x + (20 - y)$ _____

7. $x \div 3 + y$ _____

8. $4y \div 2 + (8x + 10)$ _____

9. Patty made \$34 baby sitting on each of 3 weekends. If she spent \$50 on gifts for her family, how much money does she have left?

10. Carlos solved $20 - (2 \times 6) + 8 \div 4 = 29$. Is this the correct answer?

Name _____

Order of Operations

Use the order of operations to evaluate each expression.

1. $4 \times 4 + 3 =$ _____ 2. $3 + 6 \times 2 \div 3 =$ _____

3. $24 - (8 \div 2) + 6 =$ _____ 4. $(15 - 11) \times (25 \div 5) =$ _____

5. $26 - 4 \times 5 + 2 =$ _____ 6. $15 \times (7 - 7) + (5 \times 2) =$ _____

7. $(8 \div 4) \times (7 \times 0) =$ _____ 8. $5 \times (6 - 3) + 10 \div (8 - 3) =$ _____

9. Which is a true statement, $5 \times 4 + 1 = 25$ or $3 + 7 \times 2 = 17$?
Explain your answer.

Insert parentheses to make each statement true.

10. $25 \div 5 - 4 = 25$ _____

11. $7 \times 4 - 4 \div 2 = 26$ _____

12. $3 + 5 \times 2 - 10 = 6$ _____

13. Insert parentheses in the expression
 $6 + 10 \times 2$ so that:

a. the expression equals 32. _____

b. the expression equals $(12 + 1) \times 2$. _____

14. Solve $(25 - 7) \times 2 \div 4 + 2$.

A 18 B 11 C 6 D 5

15. Write two order-of-operation problems. Then trade with a classmate and solve the problems.

Name _____

Variables and Expressions

A **variable** is a letter or symbol. It represents an unknown amount that can change.

You can do mathematical operations with variables and numbers.

You can state these operations in word expressions. You can also state them in algebraic expressions.

EXAMPLES

Operation	+	-	×	÷
Word expression	the sum of r and 3	the difference between r and 3	the product of r and 3	r divided by 3
Algebraic expression	$r + 3$	$r - 3$	$3r$	$r \div 3$
Other ways of saying the word expression	3 added to r 3 more than r	3 subtracted from r 3 less than r	r multiplied by 3 3 times r	r separated into 3 equal parts

Complete the algebraic expression for each of the following word expressions.

1. the sum of b and 8

b ____ 8

2. the difference between m and 6

m ____ 6

3. the quotient of k and 16

k ____ 16

4. 7 less than z

z ____ 7

5. 2 more than d

d ____ 2

6. j divided by 4

j ____ 4

Circle the letter of the correct word expression for each algebraic expression.

7. $t - 13$

a. 13 subtracted from t

b. t subtracted from 13

8. $4n$

a. 4 more than n

b. 4 times n

9. $11 + s$

a. 11 more than s

b. 11 less than s

10. $45a$

a. the product of a and 45

b. 45 more than a

11. $y \div 6$

a. y less 6

b. 6 equal parts of y

12. $v - 5$

a. 5 less than v

b. v subtracted from 5

Name _____

Variables and Expressions

For questions 1 through 4, use a variable to write an algebraic expression that represents the word phrase.

1. a number of apples divided into 12 baskets _____
2. 5 more than s _____
3. three times the cost for one hat _____
4. nine fewer than the total number of people _____

For 5 through 7, translate each algebraic expression into words.

5. $3 + w$ _____
6. $8x$ _____
7. $40 - p$ _____
8. Write two different word phrases for the expression $\frac{t}{30}$.

9. Do $5 + x$ and $x + 5$ represent the same expression? Explain.

10. Dan is 12 in. taller than Jay. Use x for Jay's height. Which expression shows Dan's height?

A $x + 12$

B $x - 12$

C $12x$

D $\frac{x}{12}$

11. Explain what the expression $6x$ means.

A Garden in the Clouds

NTI Day 4
RI.5.6

Will Fiona and Nora find a place where they can have a garden in the city?

¹ Fiona and Nora were becoming accustomed to life in the city. They were learning their way around, and they were discovering all kinds of exciting things. The best library they had ever been to was right across the street from their apartment. It had an enormous selection of books, and they had already made friends with Ms. Applebaum, one of the librarians. Sometimes, she put books aside that she thought Fiona and Nora might enjoy.

² The sisters still missed some things about living in the country, but they had learned that they just needed to look a bit harder to find similar things in the city. After they had discovered the nearby park with their mother one day, they spent a lot of time there. They roller-bladed on the trail that ran around the perimeter of the park. Their dad made friends with the man who sold food for the ducks, and he always gave them an extra handful.

³ The one thing that Fiona and Nora still missed about their old farmhouse was having a place for a garden. Both girls had inherited their mother's green thumb. Last summer, they had grown so many tomatoes they were able to make enough spaghetti sauce to last most of the winter.

⁴ One afternoon, Fiona, Nora, and Mom decided to take a different route to the park. They liked to explore the side streets on their way there. Nora looked up when a large cloud passed overhead. She noticed something that looked like a tree on top of the building beside her.

⁵ "That looks like a tree on the roof!" she exclaimed. Fiona and Mom looked up. They couldn't see very well because they stood directly below the building. They walked a bit further down the street, and then they crossed over to the other side to get a better view.



⁶ "You're right, Nora," said Fiona. "I think there's actually a whole garden up there! I can see a trellis with some flowers creeping up it. And there are some more pots along the far side of the roof."

⁷ "It looks like they have a rooftop garden," said Mom. "I've heard of them, but I've never actually seen one before. People who live in cities sometimes use the space on the top of their buildings for gardening."

⁸ "Do you think we could start one on the roof of our building, Mom?" asked Fiona.

⁹ Mom smiled. "We'll have to check with the superintendent of our building first," she replied. "But I doubt it will be a problem. I've seen a sign for stairs leading to the roof. I've even seen a family taking a picnic dinner and a telescope up there."

¹⁰ Nora grinned. "Sometimes, you just have to look a little harder to find what you're looking for in the city."

Vocabulary Skills

Write the words from the story that have the meanings below.

1. used to or familiar with

_____ Par. 1

2. choice

_____ Par. 1

3. the area around something

_____ Par. 2

4. received from a relative

_____ Par. 3

5. a structure that supports climbing plants

_____ Par. 6

6. the landlord or manager of a building

_____ Par. 9

An **idiom** is a group of words that has a special meaning. For example, the idiom *hit the hay* means *go to bed*. Write the idiom from paragraph 3 on the line under its meaning.

7. a talent for growing plants

Read each word below. Then, write the letter of its antonym on the line beside the word.

- | | |
|-------------------|--------------|
| 8. _____ enormous | a. different |
| 9. _____ exciting | b. tiny |
| 10. _____ same | c. summer |
| 11. _____ winter | d. boring |

Fill in the blanks below with the possessive form of the word in parentheses.

12. The _____ friendship made the girls feel at home. (librarian)
13. _____ talent for gardening had been passed on to Nora and Fiona. (Mom)

Reading Skills

1. Check the phrase that best describes the author's purpose.

_____ to tell a story about two sisters discovering rooftop gardens

_____ to persuade the reader to start a rooftop garden

_____ to share information about the best type of plants to use in a rooftop garden

Dialogue is what a character says. The words in dialogue are always in quotation marks.

2. On the line below, write the words that are dialogue in paragraph 5.

3. Check the word or words that best describe what type of selection this is.

_____ historical nonfiction

_____ folktale

_____ fiction

4. Do you think Mom will help the girls start a rooftop garden of their own? Why or why not?

Study Skills

Use a dictionary to help you divide these words into syllables.

1. apartment _____
2. enormous _____
3. spaghetti _____

Day 4

Name _____ Date _____

Abigail Adams lived in a society in which women could not vote, hold office, or attend college. Formal education was actually considered a disadvantage for a woman. It might make her think she knew as much as her husband!

Abigail Adams did not see things that way. She thought that women and men should be treated as equals. She made a point of speaking up for what she believed. Sometimes, though, even Abigail Adams had to admit that being *outspoken* could cause problems.

When her husband, John Adams, ran for President in 1796, Abigail Adams worried about becoming *First Lady*. As the President's wife she would have to keep her opinions to herself. She was not sure she could do that.

She was soon put to the test. In 1797 John Adams was elected President. Soon after, Abigail Adams discovered the power of the press.

The newspapers reported what the First Lady said and did. They always seemed to find something to criticize. Some said Abigail Adams spent too much money. Others accused her of being cheap. The most hurtful charge was that she influenced her husband's political decisions.

After three years of being misquoted and misunderstood, Abigail Adams learned to choose her words with care. When she and her husband moved to the new capital city, she praised the President's House, saying

that it was "built for ages to come." She decided not to point out that it was not quite ready to live in.

In fact, the house was still being built when Abigail and John moved in. It was cold, dark, and damp, even with fires burning in all 13 of its fireplaces. There was not even a place to dry the laundry. The family ended up hanging a clothesline across the conference room. In its unfinished condition, the room was good for little else, Abigail Adams told her sister Mary.

What bothered Abigail Adams most about life in Washington was the widespread use of slave labor. She had always believed that slavery was wrong. On this subject she spoke her mind. She had learned to give in on minor matters, but she would never compromise on

important issues. Abigail Adams was a woman who was ahead of her time.

Abigail Adams, A Woman Ahead of Her Time




Name _____ Date _____

Abigail Adams, A Woman Ahead of Her Time

Choose the best answer and mark the letter of your choice.

1. Which of these is the best summary for this article?
 - A. Abigail Adams was the second First Lady.
 - B. Abigail Adams spoke out for what she believed in and was a woman ahead of her time.
 - C. Abigail Adams was educated.
 - D. Abigail Adams was criticized.
2. In this article, the word *outspoken* means
 - F. open and honest.
 - G. out loud.
 - H. well said.
 - J. not polite.
3. In this article, the term *First Lady* means
 - A. the wife of the President of the United States.
 - B. the wife of the first President of the United States.
 - C. the first woman to live in the President's House.
 - D. the wife of any politician.
4. Abigail Adams worried about becoming First Lady because she
 - F. might be unpopular.
 - G. would have to move to the new capital.
 - H. would have to keep her opinions to herself.
 - J. did not want to be a politician's wife.
5. Which of these newspaper reports upset Abigail Adams the most?
 - A. reports that she was cheap
 - B. reports that she influenced her husband's political decisions
 - C. reports that she spent too much money
 - D. reports that she said the President's House was built for ages to come
6. Abigail and John Adams moved to the new capital
 - F. when John first became President.
 - G. after the President's House was completed.
 - H. before John became President.
 - J. toward the end of John's presidency.
7. Which of these is a fact presented in the article?
 - A. The First Lady cannot have opinions.
 - B. Abigail Adams spoke out against slavery.
 - C. The press reported that Abigail Adams did not like the President's House.
 - D. Women should not have as much education as men.
8. The article gives you enough information to conclude that
 - F. Abigail Adams was not upset by the widespread use of slave labor.
 - G. The Adams family owned slaves.
 - H. Abigail Adams changed her opinion about slavery.
 - J. Abigail Adams was upset by the widespread use of slave labor.

I  you a question!

How do you create Examples, Details, and Studies?

You will be provided with three reason video games are bad for kids and 3 reasons video games are good for kids. You will need to create 2 details or examples and a study for each reason. Use your transitions: For example, for instance, to illustrate, Specifically, Another example

1. Video games are good for kids because they are educational.

1. Specifically, some games have puzzles you have to figure out and solve to move forward.

2. For example, In the Legend of Zelda you have to figure out puzzles to get through the dungeons and unlock doors.

3. According to a study by the University of Kentucky educational video games increase student performance by 75% on state test.

2. Video games are good for kids because they can be used to build teamwork.

1. _____

2. _____

3. _____

3. Video games are good for kids because they build hand-eye coordination.

1. _____

2. _____

3. _____

Instrument Families

- b. Explain how sound is produced by EACH of the two instruments.