

LESSON 3: SOLVE – V and E

Warm-Up

Directions: Solve for S, O, and L in the following problems. Be sure to separate the facts in the word problems.

- 1.** Teresa is working on an essay for a writing contest. Her essay cannot be more than 1,000 words. She wrote 189 words over the weekend and then worked on her essay on Monday, completing another 356 words. In order to stay within the guidelines of 1,000 words, what is the maximum number of words she can add to her essay?

S Underline the question.

This problem is asking me to find _____.

O Identify the facts.

Eliminate the unnecessary facts.

List the necessary facts.

L Write in words what your plan of action will be.

Choose an operation or operations.

- 2.** The art students are going on a field trip to the museum. There are a total of 124 students and 8 adults riding the bus. The trip will last all day, and the students will be taking a lunch with them. If each bus holds 45 people, how many buses will be needed for the field trip?

S Underline the question.

This problem is asking me to find _____.

O Identify the facts.

Eliminate the unnecessary facts.

List the necessary facts.

L Write in words what your plan of action will be.

Choose an operation or operations.

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Directions: Look at the following problems and decide how they would be written using numbers and an operation. Then write a number sentence.

1. six more than ten

Numerical form:

Number sentence:

2. twenty-four divided into three parts

Numerical form:

Number sentence:

3. seven multiplied by five

Numerical form:

Number sentence:

Directions: Match the following and write the number sentence.

Six less than thirteen

$56 \div 8$

Forty-two more than seven

$4 \cdot 11$

Fifty-six divided into eight parts

$13 - 6$

Increase nine by twelve

$7 + 42$

Multiply four by eleven

$9 + 12$

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Directions: Complete the V and E steps for the SOLVE with your teacher and partner.

- 1.** ~~Valorie is saving money to buy a birthday present for her friend Jalissa. | Jalissa will turn 14 at the end of the month and is having a party. | Valorie has already saved \$7.55, | but the CD that she wants to purchase costs \$20.89 including tax. |~~ How much more does Valorie need to purchase the CD?

S Study the Problem

Underline the question.

This problem is asking me to find the difference in the amount Valorie has and the amount Valorie needs to buy the CD.

O Organize the Facts

Identify the facts.

Eliminate the unnecessary facts.

List the necessary facts. Saved \$7.55, CD costs \$20.89

L Line up a Plan

Write in words what your plan of action will be.

Subtract the amount of money Valorie has saved from the cost of the CD.

Choose an operation or operations. Subtraction

V Verify Your Plan with Action

Estimate your answer.

Carry out your plan.

E Examine Your Results

Does your answer make sense? (Compare your answer to the question.)

Is your answer reasonable? (Compare your answer to the estimate.)

Is your answer accurate? (Check your work.)

Write your answer in a complete sentence.

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Directions: Complete the V and E steps for the SOLVE with your partner.

- 2.** ~~Carl and Dan are collecting newspapers for a school recycling project. | Carl has collected 387 newspapers this month, | and Dan has collected 493 newspapers. | The class that collects the most newspapers wins an ice cream party. |~~ How many newspapers have Carl and Dan collected?

S Study the Problem

Underline the question.

This problem is asking me to find the number of newspapers Carl and Dan have collected.

O Organize the Facts

Identify the facts.

Eliminate the unnecessary facts.

List the necessary facts. Carl collected 387 newspapers,
Dan collected 493 newspapers

L Line up a Plan

Write in words what your plan of action will be.

Add the number of newspapers Carl collected to the number of newspapers Dan collected.

Choose an operation or operations. Addition

V Verify Your Plan with Action

Estimate your answer.

Carry out your plan.

E Examine Your Results

Does your answer make sense? (Compare your answer to the question.)

Is your answer reasonable? (Compare your answer to the estimate.)

Is your answer accurate? (Check your work.)

Write your answer in a complete sentence.

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Directions: Complete the V and E steps for SOLVE with your partner.

3. ~~The Patterson family is taking a vacation. | They are going to visit relatives for a family reunion. | They will travel by car, | and the trip is a total of 648 miles. | If they travel an average speed of 54 miles an hour, | how many hours will the trip last?~~

S Study the Problem

Underline the question.

This problem is asking me to find the number of hours the trip will last.

O Organize the Facts

Identify the facts.

Eliminate the unnecessary facts.

List the necessary facts. Trip is 648 miles, travel at an average speed of 54 mph

L Line up a Plan

Write in words what your plan of action will be.

Divide the total number of miles they will travel by the average speed they travel.

Choose an operation or operations. Division

V Verify Your Plan with Action

Estimate your answer.

Carry out your plan.

E Examine Your Results

Does your answer make sense? (Compare your answer to the question.)

Is your answer reasonable? Compare your answer to the estimate.)

Is your answer accurate? (Check your work.)

Write your answer in a complete sentence.

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Directions: Complete the V and E steps for following SOLVE problem.

- 4.** ~~Matt's uncle came to visit. | He brought Matt his old baseball card collection as a gift. |~~ Each page holds 9 baseball cards, | and there are a total of 48 pages in the album. | If each page is full, how many total baseball cards are in the album?

S Study the Problem

Underline the question.

This problem is asking me to find the number of baseball cards that are in the album.

O Organize the Facts

Identify the facts.

Eliminate the unnecessary facts.

List the necessary facts. Each page hold 9 cards, 48 pages

L Line up a Plan

Write in words what your plan of action will be.

Multiply the number of pages by the number of cards on each page.

Choose an operation or operations. Multiplication

V Verify Your Plan with Action

Estimate your answer.

Carry out your plan.

E Examine Your Results

Does your answer make sense? (Compare your answer to the question.)

Is your answer reasonable? (Compare your answer to the estimate.)

Is your answer accurate? (Check your work.)

Write your answer in a complete sentence.

LESSON 3: SOLVE – V and E

Directions: Work with a partner to complete Problem 5. Solve for S, O, L, V, and E.

5. Colin has a coin collection that his uncle gave him. When his uncle gave him the collection, there were 792 different coins. In the last 2 years, Colin has added 76 coins to the collection. When he turns 13 this year, his uncle will give him an additional 120 coins that will be part of his collection. How many coins will he have in his collection after his birthday?

S Underline the question.

This problem is asking me to find _____
_____.

O Identify the facts.

Eliminate the unnecessary facts.

List the necessary facts.

L Write in words what your plan of action will be.

Choose an operation or operations.

V Estimate your answer.

Carry out your plan.

E Does your answer make sense? (Compare your answer to the question.)

Is your answer reasonable? (Compare your answer to the estimate.)

Is your answer accurate? (Check your work.)

Write your answer in a complete sentence.

LESSON 3: SOLVE – V and E

Directions: Work with a partner to complete Problem 6. Solve for S, O, L, V, and E.

6. Ms. Sanchez plants a vegetable garden in the spring. This year she is adding corn and potatoes to her garden. Over the weekend, she planted 4 rows of tomato plants with 7 plants in each row. She also planted 3 rows of pepper plants with 8 plants in each row. How many tomato and pepper plants did she put in over the weekend?

S Underline the question.

This problem is asking me to find _____
_____.

O Identify the facts.

Eliminate the unnecessary facts.

List the necessary facts.

L Write in words what your plan of action will be.

Choose an operation or operations.

V Estimate your answer.

Carry out your plan.

E Does your answer make sense? (Compare your answer to the question.)

Is your answer reasonable? (Compare your answer to the estimate.)

Is your answer accurate? (Check your work.)

Write your answer in a complete sentence.

LESSON 3: SOLVE – V and E

Homework

.....
Name _____ **Date** _____

Directions: Solve the following problems for S, O, L, V, and E.

Alex is taking guitar lessons. He tries to practice every day. His goal for the week is to practice 210 minutes. On Monday he practiced for 35 minutes, on Tuesday 40 minutes, on Wednesday he did not practice, and on Thursday he practiced for 50 minutes. In order to meet his goal for the week, how many minutes must he practice?

1. S – Underline the question.

This problem is asking me to find _____
_____.

2. O – Identify the facts.

Eliminate the unnecessary facts.

List the necessary facts.

3. L – Write in words what your plan of action will be.

Choose an operation or operations.

4. V – Estimate your answer.

Carry out your plan.

LESSON 3: SOLVE – V and E

Homework

.....
Name _____ **Date** _____

5. E – Does your answer make sense? (Compare your answer to the question.)

Is your answer reasonable? (Compare your answer to the estimate.)

Is your answer accurate? (Check your work.)

Write your answer in a complete sentence.

Jamar and 3 of his friends are going to a concert for his birthday. His dad is ordering the tickets online, and they cost \$18.95 each. There is a shipping and handling charge of \$2.50 per ticket. The tickets are for seats in the 16th row and the middle section. What is the total cost of the tickets including the shipping and handling fee?

6. S – Underline the question.

This problem is asking me to find

7. O – Identify the facts.

Eliminate the unnecessary facts.

List the necessary facts.

8. L – Write in words what your plan of action will be.

Choose an operation or operations.

LESSON 3: SOLVE – V and E

Homework

.....
Name _____ **Date** _____

9. V – Estimate your answer.
Carry out your plan.

10.E – Does your answer make sense? (Compare your answer to the question.)

Is your answer reasonable? (Compare your answer to the estimate.)

Is your answer accurate? (Check your work.)

Write your answer in a complete sentence.