Chapter Summary

Summarize the following key concepts you learned in this chapter.

Polygons:

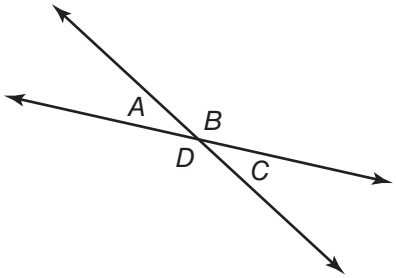
Angles:

Perimeter:

Vocabulary

Look again at the vocabulary table on page 3. Write a sentence explaining how all the statements you labeled P are related. Write another sentence to explain how all the statements you labeled C are related to one another.

True or False? A polygon can have curves. Explain your answer.



Determine the measure of angle *B* if angle *D* is 30°.

Does angle *A* have the same measure as angle *C*? Explain.

Write a sentence for Jahmal to explain how to find the angle sums for the shapes he has drawn.

CHAPTER 2

Chapter Summary

Summarize the following key concepts you learned in this chapter.

Equivalent fractions:

Terminating and repeating decimals:

Writing decimals as fractions:

Writing fractions as decimals:

Vocabulary

Look again at the vocabulary matching activity on page 14. Choose two answers. Explain how you can recognize and use those vocabulary words when working with decimals and fractions.

For each of the following, determine whether the fraction and decimal are equivalent. If they are equivalent, write *equivalent*. If they are not equivalent, write *not equivalent*. Explain your answer.

1. 3.45 and $3\frac{45}{100}$

2. 0.68 and $\frac{6}{8}$

3. 4.1 and $\frac{41}{100}$

4. 0.75 and $\frac{75}{100}$

Kara said: $\frac{9}{25}$ is equivalent to 3.6.	Caroline said: $\frac{9}{25}$ is equivalent to 0.36.

Which girl gave the correct equivalent fraction? Explain where the other girl made her error.

Explain why 5 feet 5 inches is not the same as 5.5 feet.

Your friend says that he would choose a fraction that had a denominator between the denominators of two given fractions to find a fraction between them. What is wrong with his logic?

Chapter Summary

Summarize the following key concepts you learned in this chapter.

Order of operations:

Algebraic expressions:

Exponents:

Vocabulary

Look again at the vocabulary statements on page 25. Choose one statement. Write a sentence or two explaining it here.

True or False?

The expression $9(8 - 2)$ is equal to $9 \cdot 8 - 9 \cdot 2$. Explain your answer.

Use a mathematical property to complete each expression. Write the property that you used.

Complete each expression	Property
$(7 + 32) + 15 = 7 + (\_\_\_\_\_ + \_\_\_\_\_)$	
$46 + 75 = \_\_\_\_\_ + 46$	
$23(56 + 81) = \_\_\_\_\_ \cdot 56 + 23 \cdot \_\_\_\_\_$	
$913 \cdot 1 = \_\_\_\_\_$	

Write statements in the cartoon giving examples of real-world numbers in the millions, billions, and trillions.

CHAPTER 4

Chapter Summary

Summarize the following key concepts you learned in this chapter.

Multiplication and division of fractions:

Multiplication and division of decimals:

Working with sets of data:

Vocabulary

Look again at the vocabulary matching exercises on page 40. Choose three of the words. Explain how they are related to each other.

The following expressions have not been simplified correctly. Identify each error. Find each product or quotient.

$\frac{8}{9} \cdot \frac{3}{4} = \frac{11}{36}$

$26 \div \frac{1}{5} = 5\frac{1}{6}$

$1.4 \cdot 4.2 = 58.8$ _____

_____

$13.1 \div 0.2 = 0.655$ _____

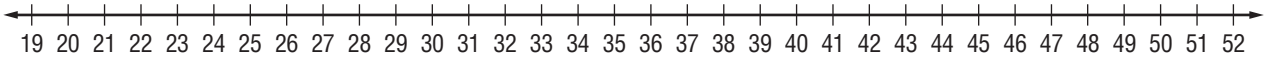
_____

$3.9 \div 0.6 = 2.34$ _____

_____

Complete the line plot for the following set of data. Then find the mean, median, mode, outlier(s), and range of the data.

Data Set	25	27	20	31	52	27	19	30	26



Mean: _____

Median: _____

Mode: _____

Outlier: _____

Range: _____

Create a data set of 10 values with a mean of 34, a mode of 28, and a median of 37.

_____

CHAPTER 5

Chapter Summary

Summarize the following key concepts you learned in this chapter.

Ratios: _____

_____

Proportions: _____

_____

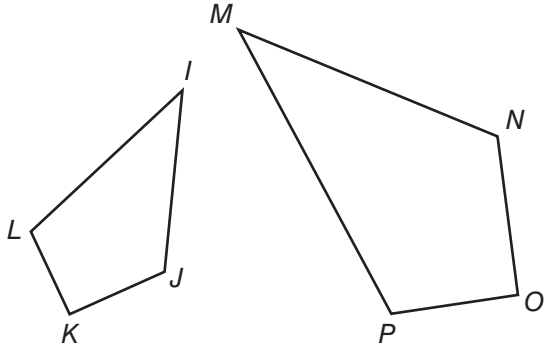
Similarity and congruence: _____

_____

_____

Vocabulary

Look again at the vocabulary exercises on page 53. Use the words to describe the figures below.



- Quadrilateral *IJKL* is _____ to quadrilateral *MNOP*, but the two figures are not _____. Angles *K* and *O* are _____.
- Quadrilateral *IJKL* and quadrilateral *MNOP* provide a _____ to the statement, "All similar figures are congruent." Sides *KJ* and *ON* are _____.
- We know the figures are similar because all the pairs of corresponding sides have an _____.

Use the table below to answer the questions that follow.

Fruit	Price
Peaches	$1.99 for 1 lb
Apples	$2.40 for 20 apples
Grapes	$1.75 for $\frac{1}{2}$ pound
Oranges	$4.50 for 3 pounds

Which fruit price is an example of a unit rate?

_____

Write a ratio to show the cost of one pound of oranges.

_____

Another grocery store offers grapes for $4.00 per pound. Is this more or less expensive than the cost of grapes in the table? Explain how you found your answer.

_____

_____

Explain how you would determine the cost of one apple.

_____

_____

Explain how you would tell if two quadrilaterals are similar.

_____

_____

_____

Are all circles similar? Explain.

_____

_____

CHAPTER 6

Chapter Summary

Summarize the following key concepts you learned in this chapter.

Percents:

Changing to and from percents:

Vocabulary

Look again at the vocabulary exercises on page 63. Explain why each of the following statements is true or false.

Rational numbers are always fractions.

Percents can be used to compare amounts of numbers.

Complete the table below and answer the following questions.

Item	Regular Price	Sale Price	Discounted Amount
Sweaters	$36.50		25%
Pants		$23.80	30%
Socks	$4.50	$1.80	
Hoods		$2.50	50%

The regular price of sweaters is $36.50. Sweaters are on sale at a discount of 25%. How did you find the sale price for a sweater?

Pants cost $23.80 on sale; they are discounted 30%. How did you find the regular price for pants?

Socks regularly cost $4.50 per pair. The sale price is $1.80. How did you find what percent discount was given?

Hoods are on sale for $2.50 each. The sale price is 50% off the regular price. How did you find the regular price for hoods?

Write an equation to find each of the following. Solve. Show your work in the space provided.

13 is 10% of what number?	8 is what percent of 52?

CHAPTER 7

Chapter Summary

Summarize the following key concepts you learned in this chapter.

Finding area: _____

_____

_____

_____

Finding volume: _____

_____

_____

_____

Capacity: _____

_____

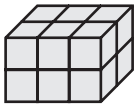
_____

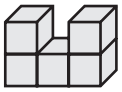
Vocabulary

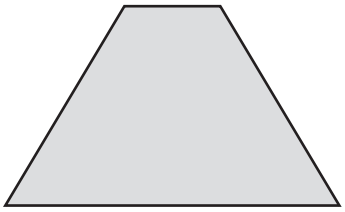
Write the meaning of each term in your own words.

Word	Meaning
area	
capacity	
perfect square	
surface area	
volume	

Identify each of the following:







_____ _____ _____

Write the letter of the appropriate formula for finding area next to each shape.

Shape	Formula
_____ Rectangle	**A.** $A = \frac{1}{2} \cdot \text{base} \cdot \text{height}$
_____ Parallelogram	**B.** $A = \frac{1}{2}h$ (base 1 + base 2)
_____ Square	**C.** $A = \pi r^2$
_____ Circle Sector	**D.** $A = \text{length} \cdot \text{width}$
_____ Triangle	**E.** $A = \text{base} \cdot \text{height}$
_____ Circle	**F.** $A = s^2$
_____ Trapezoid	**G.** $A = \frac{m}{360} \cdot \pi r^2$

The firehouse dog, Spot, needs a new doghouse now that he is full grown. The house needs to be at least 4 feet by 5.5 feet and at least 3.5 feet tall. What will be the smallest possible volume of the new doghouse? _____

Sketch two different figures with a volume of 36 cubic centimeters.

Explain how two figures can have the same volume and look different.

_____

_____

_____

CHAPTER 8

Chapter Summary

Summarize the following key concepts you learned in this chapter.

Graphs:

Coordinate plane:

Vocabulary

Look back at the vocabulary section from page 85. Write a sentence to explain how each set of terms is related to graphing.

ordered pair and coordinates:

positive numbers, negative numbers, and quadrants:

opposites:

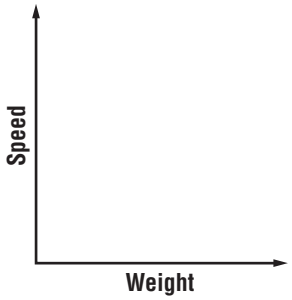
Use the following statements to place points *A* through *D* on the graph.

a. *A* is heavier than *B*, but lighter than *C*.

b. *D* is lighter than *A* and *B*.

c. *B* is faster than *D* and slower than *A*.

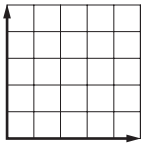
d. *A* is faster than *C*.



Gino wants to buy his mother flowers for her birthday. He also wants to buy a watch for himself. He has $45 to spend. Complete the table to show how much he can spend on each item.

Cost of Flowers (dollars)	45	36		18	9	0
Cost of Watch (dollars)	0		16	27		45

Create a graph of the data in the table.



What scale did you use for each axis? Why?

_____

_____

Should you connect the points with a line? If so, should it be solid or dashed? Why?

_____

_____

CHAPTER 9

Chapter Summary

Summarize the following key concepts you learned in this chapter.

Equations, inequalities, and solutions:

Backtracking:

Guess-check-and-improve:

Vocabulary

Look back at the vocabulary section from page 97. Use at least four of the words to explain how you would solve $m \cdot (m - 2) = 99$. Underline each vocabulary word in your explanation.

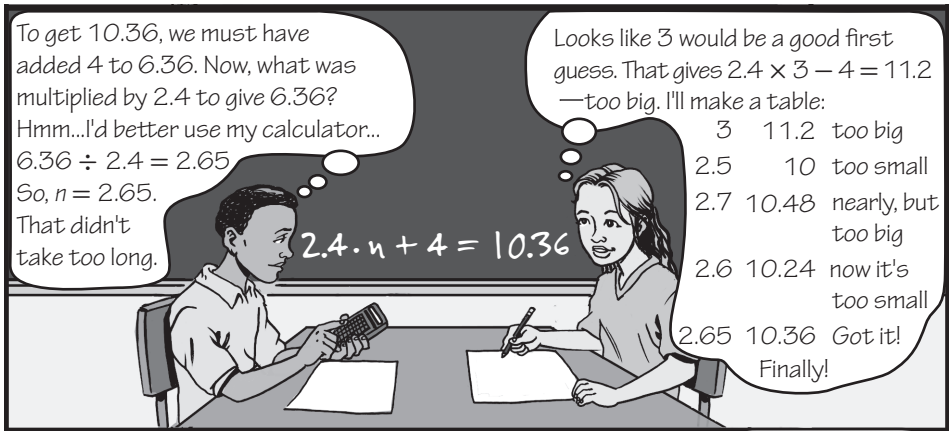
Use guess-check-and-improve to solve the equation below. Track your answers.

m	$m \cdot (m - 2) = 99$	Comment

What is the solution for $m \cdot (m - 2) = 99$? _____

Complete the table for each symbol.

Symbol	What It Means	Example Inequality
<		
>		



Marcus and Rosita are trying to solve the equation $2.4 \cdot n + 4 = 10.36$. Marcus is using backtracking, and Rosita is using guess-check-and-improve. Which student chose the better method? Why?

_____

_____

CHAPTER 10

Chapter Summary

Summarize the following key concepts you learned in this chapter.

Data displays:

Collecting and analyzing data:

Vocabulary

Look back at the vocabulary in this chapter. Choose five terms. Write the meaning for each here in your own words.

Vocabulary Word	In Your Own Words

Ken is choosing school clothes. He has four shirts and three pairs of pants. The shirts are blue, black, red, and yellow. The pants are brown, black, and tan. Draw a tree diagram to show Ken's possible combinations of clothes.

Show how you could have solved the problem using the Fundamental Counting Principle.

The table below shows the number of sixth-grade students enrolled in summer programs. There are 75 students in all. Complete the Venn diagram to show the information.

Program	Ceramics (only)	Baseball (only)	Swimming (only)	Ceramics & Baseball	Ceramics & Swimming	Baseball & Swimming	All Three	None
Freshman in Class	10	21	11	4	8	2	1	18