CHAPTER

5 **Shapes and Patterns**

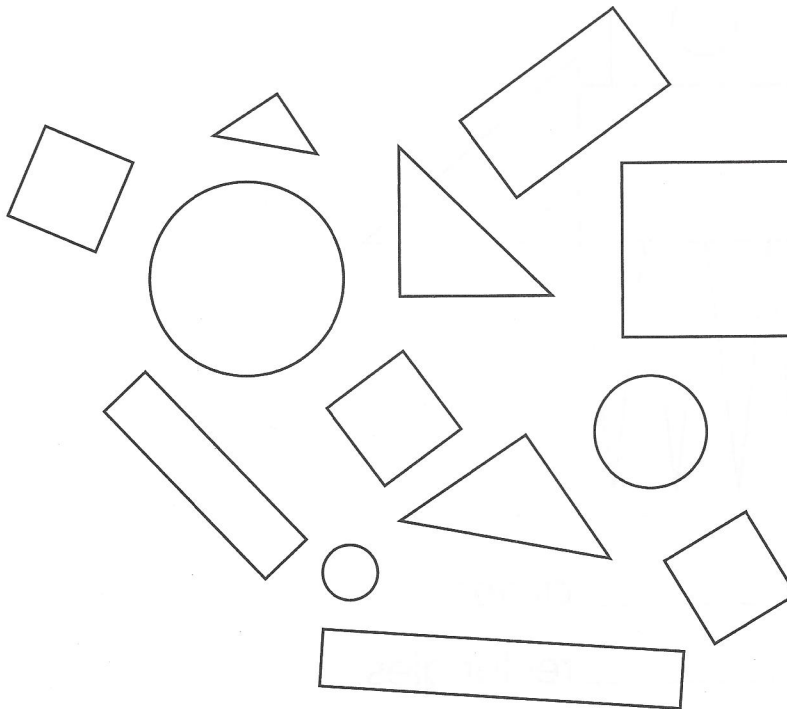**PROBLEM SOLVING**
Thinking Skills

Color.

1.

Look for the shapes that are the same.
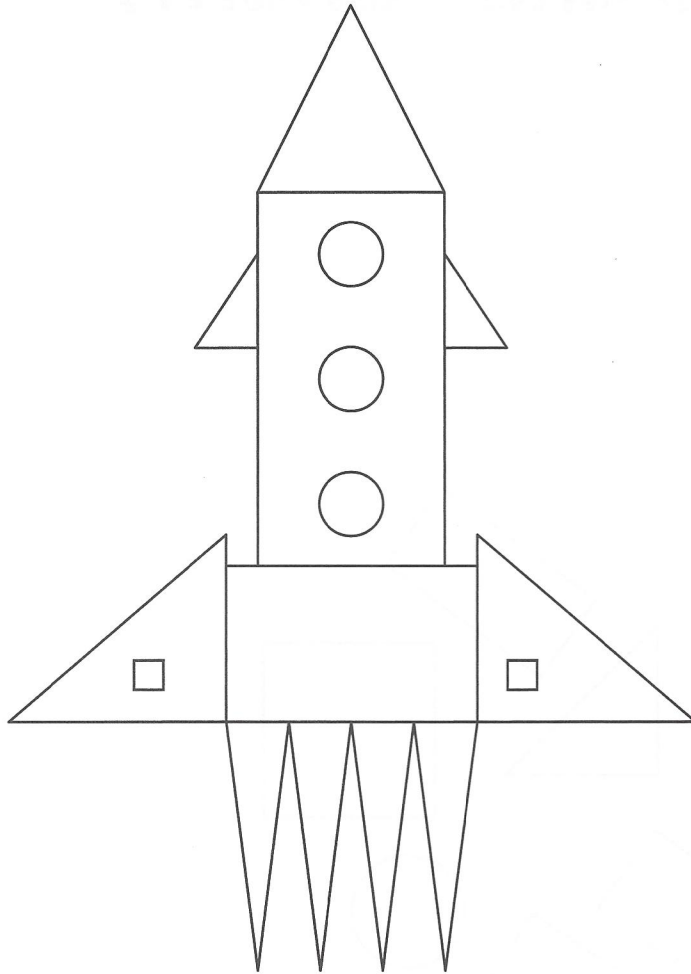Color them.
Use one color for each shape.

Look at the picture.
Then fill in the blanks.

2.
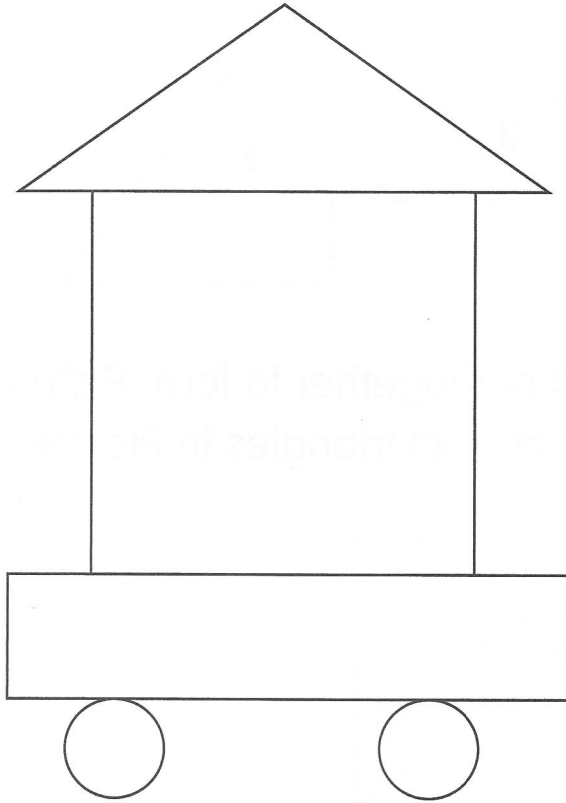
a. There are _____ circles.

b. There are _____ rectangles.

c. There are _____ squares.

d. There are _____ triangles.

e. The picture has _____ more circle(s) than squares.

**Find the shapes in the picture.
Then color.**

3.

Color two circles blue.
Color one square green.
Color one rectangle orange.
Color one triangle purple.
Add a circle and a triangle to the picture.
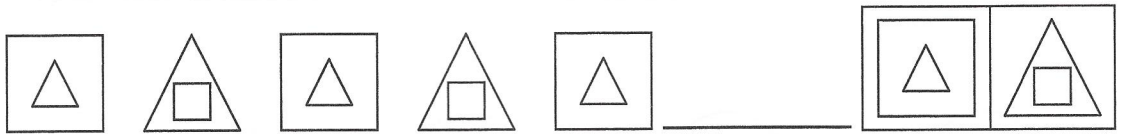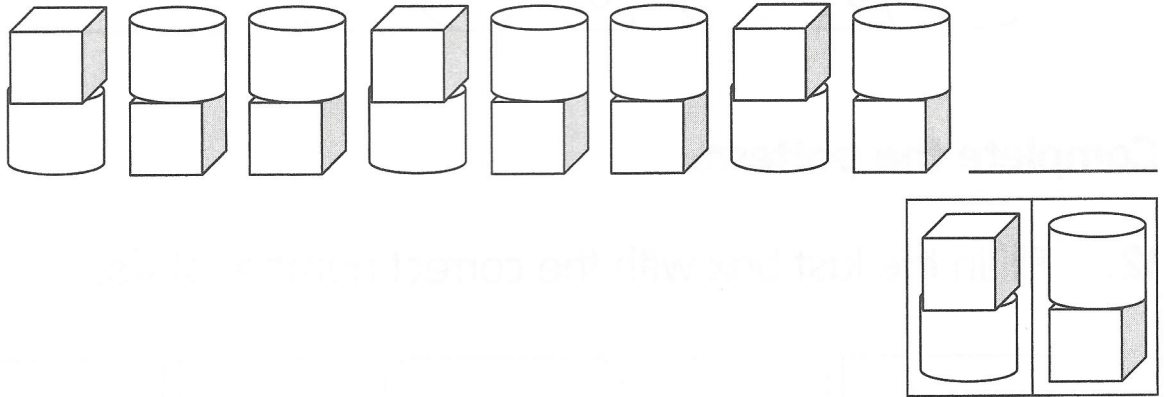Color both of them red.

PROBLEM SOLVING

Strategies
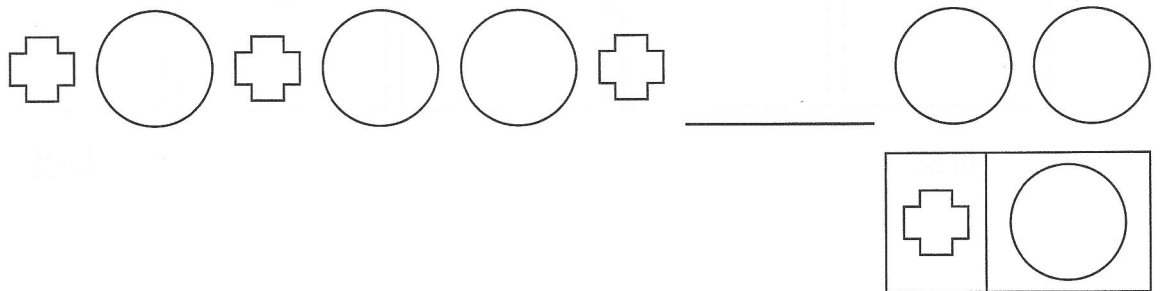
Complete the patterns.
Circle the shape that comes next.

6.

7.

Circle the missing shape.

8.

9.

Complete the patterns.
Draw the next shape.
Then write the next number in the shape.

10. △5 ○6 △7 ○8 △9 _____

11. ○9 △8 ○7 △6 ○5 △4 ○3 _____
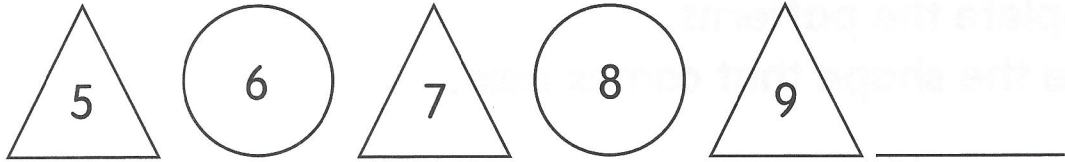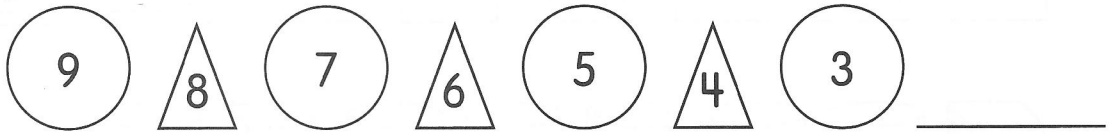
Complete the pattern.

12. Fill in the last box with the correct number of ☾s.

first _____ last

PROBLEM SOLVING
Strategies

Complete the patterns.
Circle the shape that comes next.
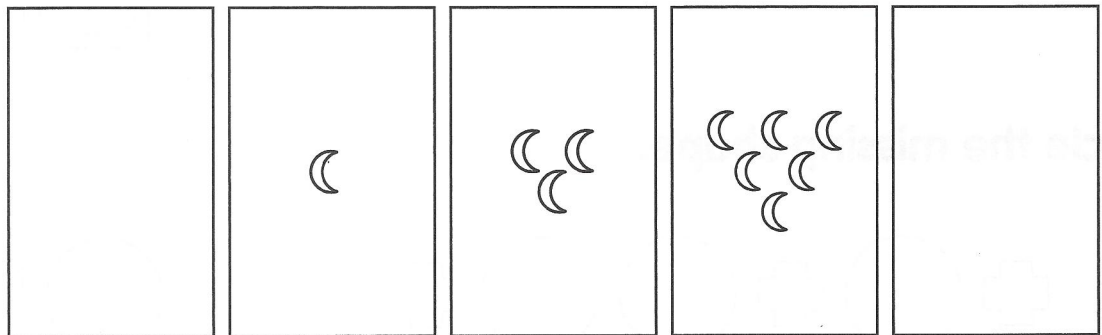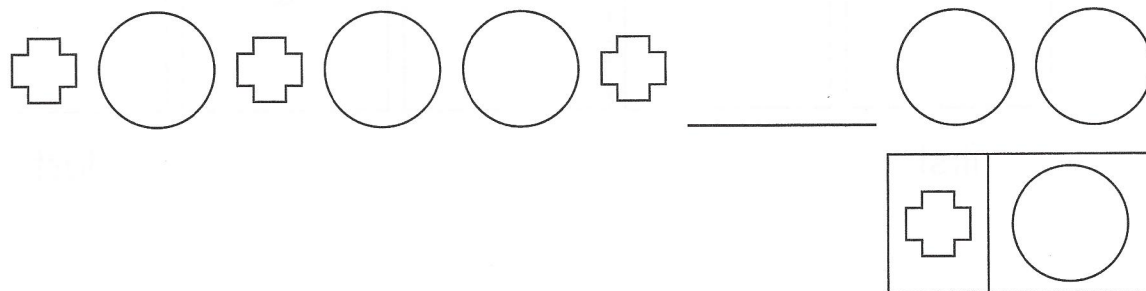
6.

7.

Circle the missing shape.

8.

9.
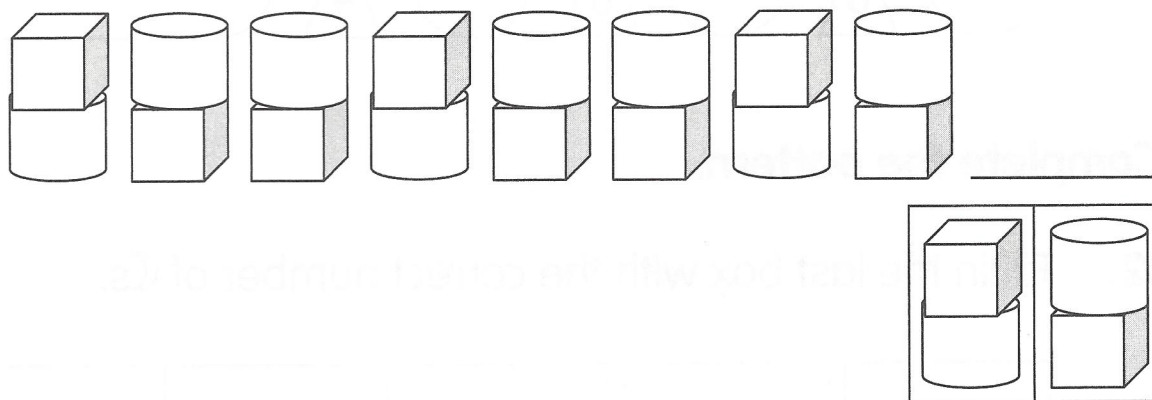
PROBLEM SOLVING

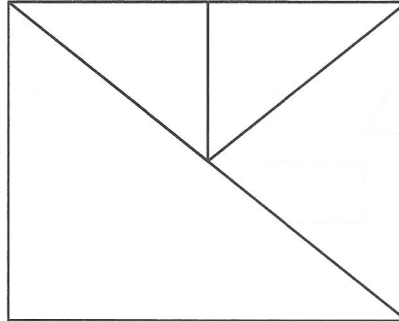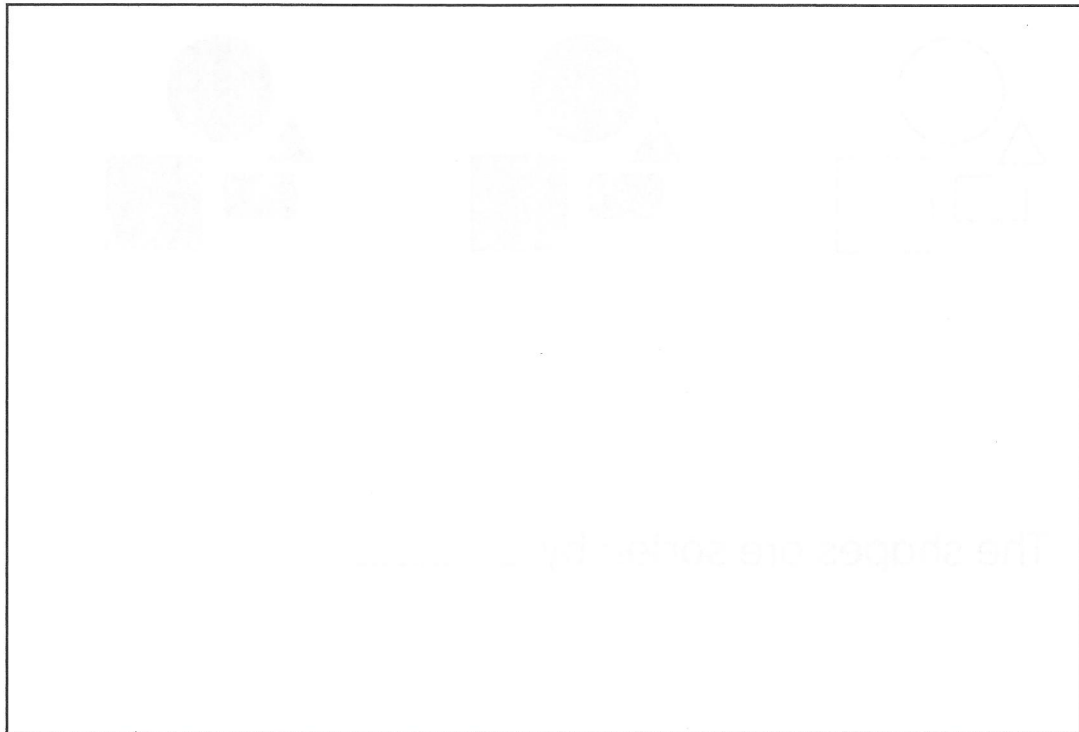## Exploration

Complete.

13.

Trace and cut out these four triangles.
Arrange them to make a picture.
Arrange them again to make a different picture.
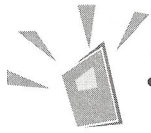
✦ Journal Writing

Look at the shapes.
Fill in the blanks with _shape_, _size_, or _color_.

14.
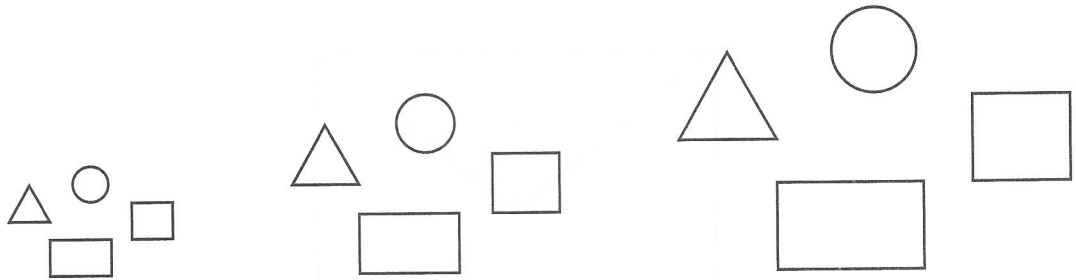
The shapes are sorted by _____.

15.
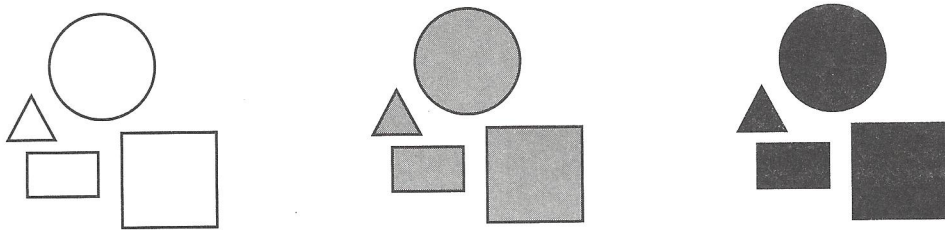
The shapes are sorted by _____.

CHAPTER 6 Ordinal Numbers and Position

PROBLEM SOLVING
Thinking Skills

Solve.
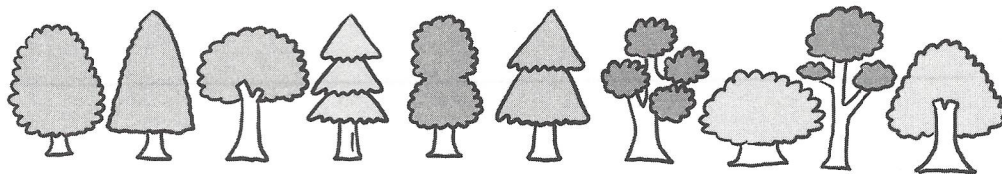
1. Choose a tree.
   Cross out (✗) your tree.
   Then complete the sentence.

   a. I choose the _____ tree from the left.

   b. Circle the 5th tree from the right.

Look at the shapes.

16. △ ⬜ △ △ ⬜ △ △ △ ⬜

a. Explain the pattern.

_____

_____

_____

_____

b. What comes next?
Circle the next shape in the pattern.

△	⬜
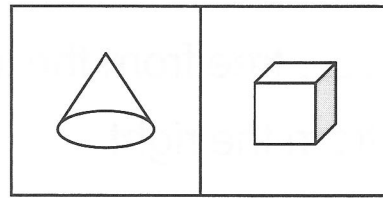
2.   **a.**   Circle the boy right behind the 5th boy.

first   last
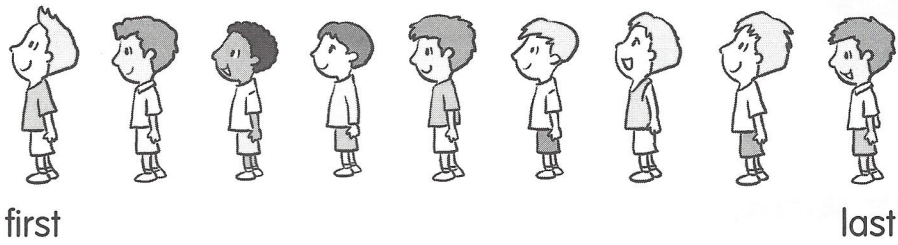
   b.   The circled boy is now 3rd in line.
   Cross out (✗) one or more children to show this.

   How many children did you cross out? _____

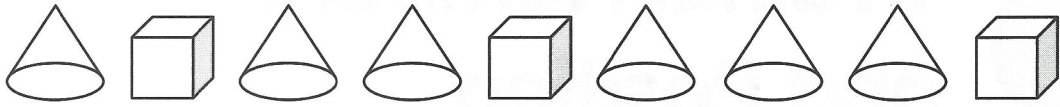**3.**   You sit with these friends in a classroom.
You are 3rd from Alex.
Eve sits behind you.
Felix sits next to you.
Jamie sits to your right.

Label the boxes to show where Alex, Eve, Felix, Jamie,
and you sit.

Front | Alex | | | | |

Back | | | | | |

PROBLEM SOLVING
Strategies

Solve.
Show your work.

4. Kate is 3rd in line.
    Russell is 3rd from the end of the line.
    3 children stand between them.
    How many children are in the line?

    _____ children are in the line.

5. Some squares are placed in a row.
    A yellow square is 4th from the right.
    It is also 4th from the left.
    How many squares are in the row?

    _____ squares are in the row.

6. 9 children are in a line.
Nelly is 4th from the front.
Peter is last in line.
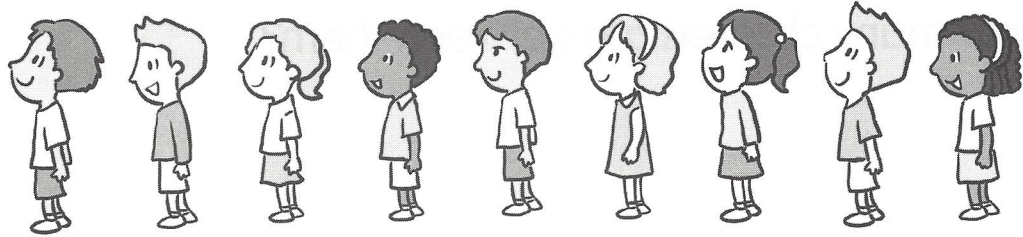How many children are between them?

_____ children are between them.

7. Jimmy and Jay line up together to buy lunch.
There are 7 people in line.
2 people are in front of them.
How many people are behind them?

_____ people are behind them.

8. Doug, Allen, Hilary, Calvin, Evan, Freda, Basa, Max, and Ginger are standing in a line.

Doug   Allen   Hilary   Calvin   Evan   Freda   Basa   Max   Ginger

a. Who is the 7th person in line? _____

b. Some people left the line.
The person that was 7th in line is now 4th in line and is the only person between Calvin and Ginger.
How many people left the line?

_____ people left the line.

c. Counting from the back, in what position is this person now?

This person is now the _____ person from the back.

9.   9 children are in a line.
Tammy is 6th in line.
Two children in front of Tammy leave the line.
One child behind Tammy also leaves the line.
How many children are in front of Tammy now?

_____ children are in front of Tammy now.

10.   There are 7 white beads arranged in a row.
The 5th bead is replaced with 2 red beads.
The first three beads are replaced with a green bead.
Two more yellow beads are then added to the back of the row.
How many beads are in the row now?

_____ beads are in the row now.

PROBLEM SOLVING

Exploration

Solve.
Show your work.

11.   8 children are in line to buy ice cream.
Amy is behind Jamar.
Kate is 5th from the back.
Kate is between Jamar and Dawn.
Draw pictures to show their positions in two ways.

9. 9 children are in a line.
Tammy is 6th in line.
Two children in front of Tammy leave the line.
One child behind Tammy also leaves the line.
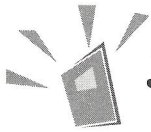How many children are in front of Tammy now?

_____ children are in front of Tammy now.

10. There are 7 white beads arranged in a row.
The 5th bead is replaced with 2 red beads.
The first three beads are replaced with a green bead.
Two more yellow beads are then added to the back of
the row.
How many beads are in the row now?

_____ beads are in the row now.

Journal Writing

True or false?

12. Write *true* or *false*.
If a statement is false, explain why it is wrong.
Draw pictures to help you.

a. Trish is behind Sally.
So, Sally is in front of Trish.   _____

b. There are 8 boats in a row.
Boat A is 5th from the left.
So, Boat A is 3rd from the right.   _____

c. Brian sits between Omar and Gina.
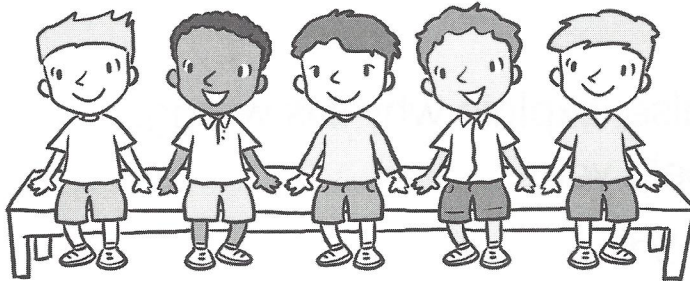Omar sits in front of Gina.   _____

Name: _____ **Date:** _____

Write a story.

13.   Five boys are sitting on a bench.

Jack   Louis   Steve   Brad   Henry

Write a story using some or all of the words.

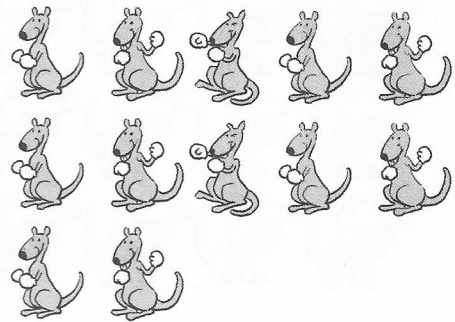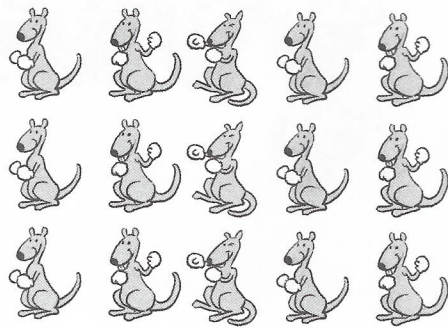| first	4th	last	left	right
between	next	in front	behind	

My story:

_____

_____

_____

_____

_____

Practice 3   Comparing Numbers

Write the number in each set.
Then fill in the blanks.

Example

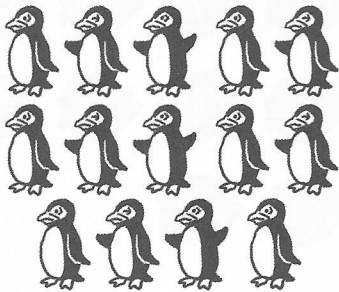Set A: ___15___   Set B: ___12___

Set ___A___ has ___3___ more kangaroos than
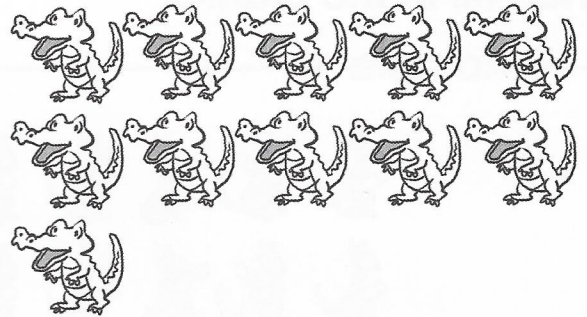
Set ___B___.

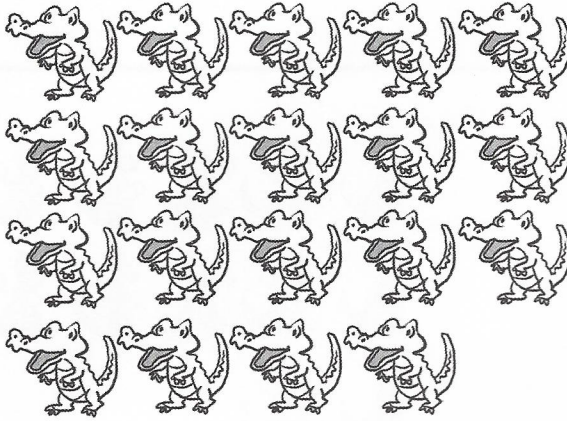1.
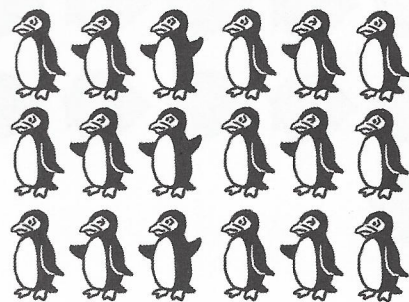
Set A: _____   Set B: _____

Set _____ has _____ more penguins than

Set _____.

Write the number in each set.
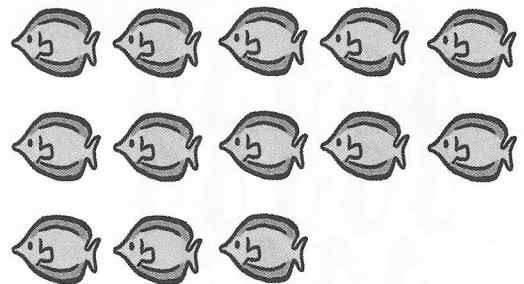**Then fill in the blanks.**
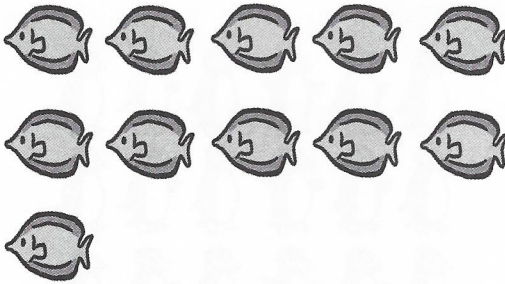
2.

Set A: _____   Set B: _____

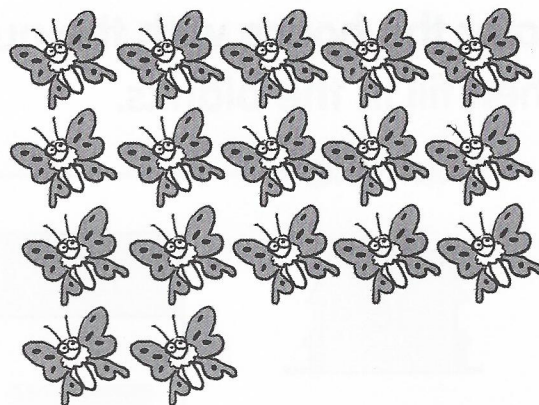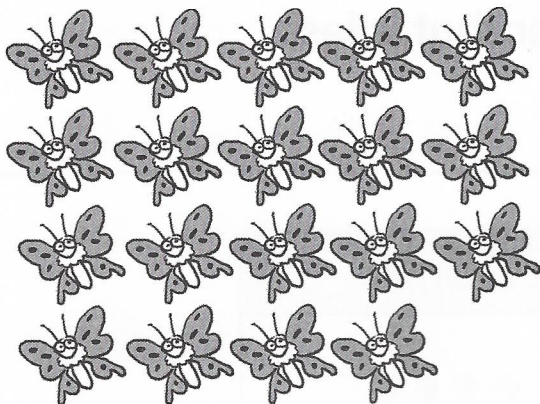Set _____ has _____ more crocodiles than

Set _____.

3.

Set A: _____   Set B: _____

Set _____ has _____ fewer fish than Set _____.
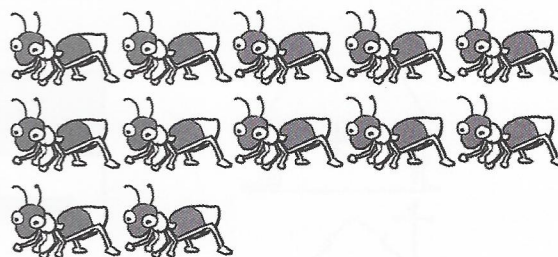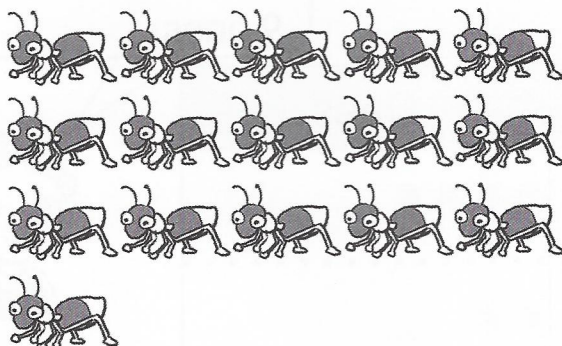
4.

Set A: _____   Set B: _____

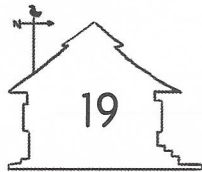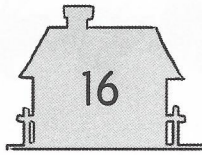Set _____ has _____ fewer butterflies than

Set _____.

5.

Set A: _____   Set B: _____

Set _____ has _____ fewer ants than Set _____.

Color the house with the number that is less.
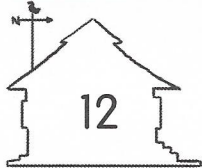**Then fill in the blanks.**

Example

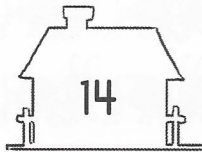| Tens	Ones

16

19

_19_ is greater than _16_.

_16_ is less than _19_.

> The tens are equal.
> Compare the ones.
> 9 ones is greater than
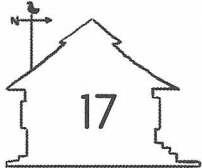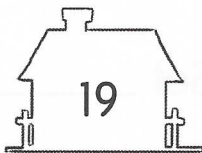> 6 ones.
> 6 ones is less than
> 9 ones.

6.

14

12

Tens	Ones

_____ is less than _____.

7.

19

17

Tens	Ones

_____ is greater than _____.

Find the number that is less.
Color the animal red.
Find the number that is greater.
Color the animal blue.

8.

17   15

9.

18   19

Color the creature with the correct number.
Then fill in the blanks.

10.   the number that is greater

14   11

How much greater is the number? _____

11. the number that is less

How much less is the number? _____

Fill in the blanks in each place-value chart.
Then color the sign with the greatest number.

12.

Tens	Ones
1	9

Tens	Ones

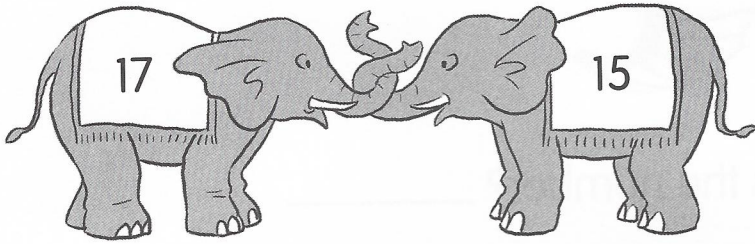| Tens	Ones

Find the number that is less.
Color the animal red.
Find the number that is greater.
Color the animal blue.

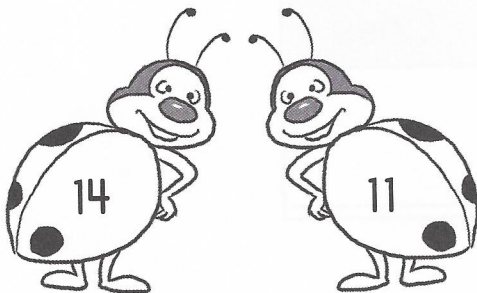**8.**

17   15

9.

18   19

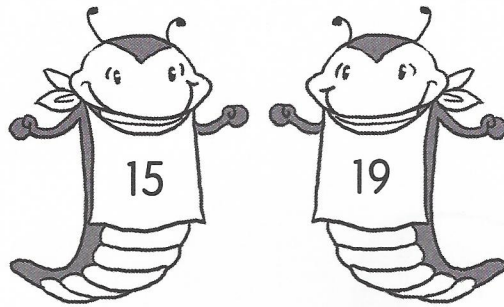**Color the creature with the correct number.**
Then fill in the blanks.

10.   the number that is greater

14   11

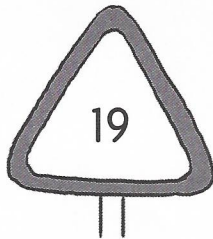How much greater is the number? _____
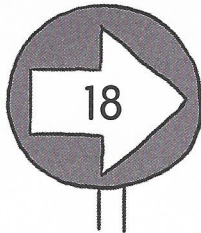
11. the number that is less

How much less is the number? _____

Fill in the blanks in each place-value chart.
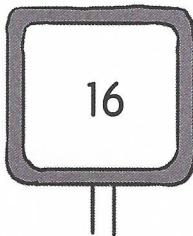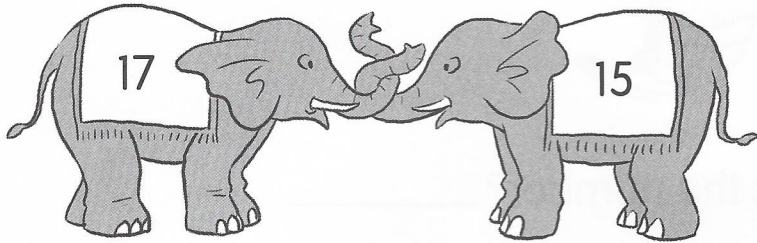**Then color the sign with the greatest number.**

12.
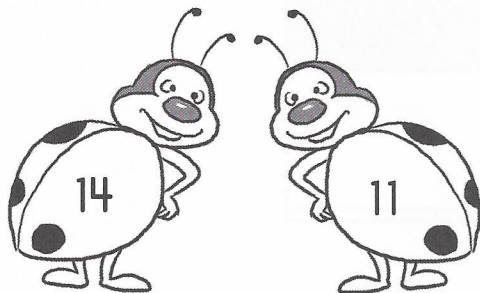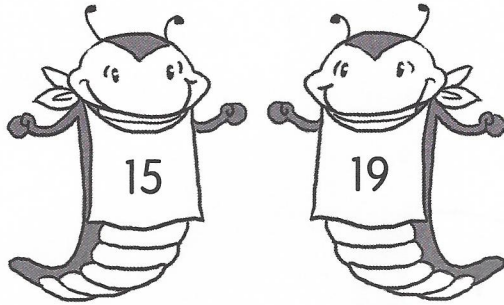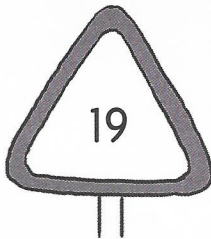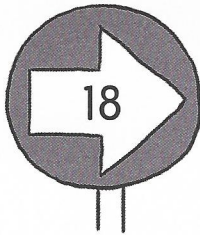
Tens	Ones
1	*9*
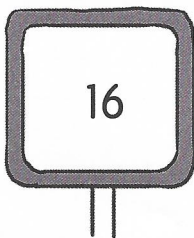
Tens	Ones

Tens	Ones

Fill in the blanks in each place-value chart.
Then color the sign with the least number.

13.
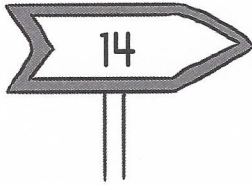
Tens	Ones
_____	_____
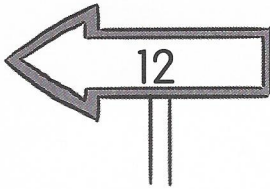
Tens	Ones
_____	_____
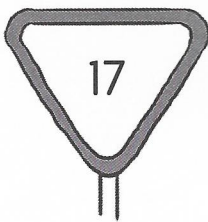
Tens	Ones
_____	_____

Compare the numbers.
Fill in the blanks.

14.

_____ is the least number.

_____ is the greatest number.

Compare the numbers.
Fill in the blanks.

15.

(18) (8) (17)

_____ is the least number.

_____ is the greatest number.

16.

(13) (16) (15) (10)
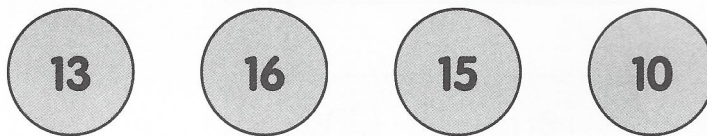
_____ is the least number.

_____ is the greatest number.

17.

(19) (9) (18) (14) (11)

_____ is the least number.

_____ is the greatest number.

Practice 5   Real-World Problems: Addition and Subtraction Facts

Solve.

1. Mandy has 5 toy bears.
    She also has 5 toy dogs.
    How many toys does she
    have in all?
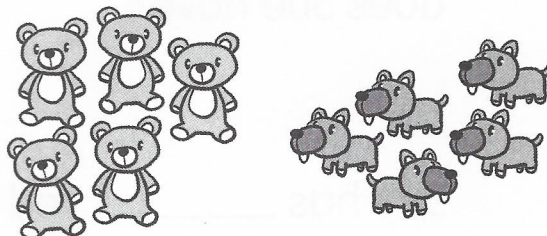
    Mandy has _____ toys in all.

2. 6 children are on the
    merry-go-round.
    6 more children join them.
    How many children are
    there now?
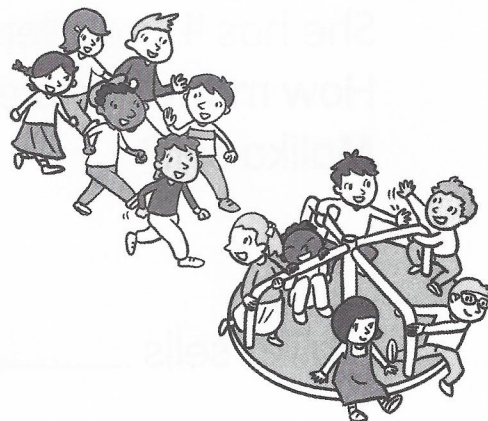
    There are _____ children now.

3. Sam has 8 marbles.
    Lamont gives him 9 marbles.
    How many marbles does Sam
    have now?
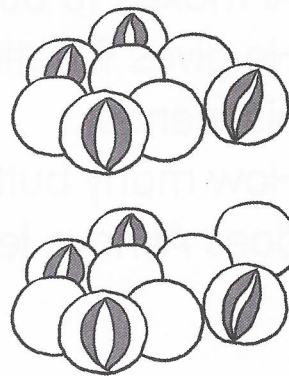
    Sam has _____ marbles now.

4. Sue has 13 green ribbons
and red ribbons.
5 ribbons are green.
How many red ribbons
does Sue have?
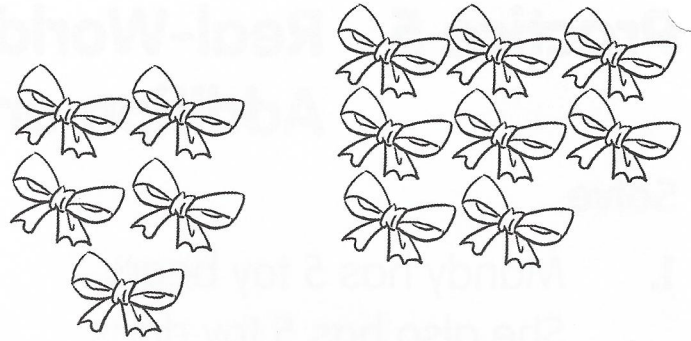
Sue has _____ red ribbons.

5. Malika makes 12 bracelets.
She sells some bracelets.
She has 4 bracelets left.
How many bracelets does
Malika sell?
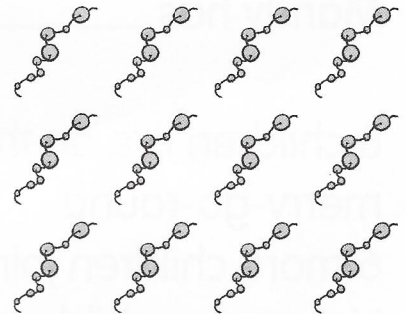
Malika sells _____ bracelets.

6. Al makes 16 butterfly knots.
He gives 9 butterfly knots to
his friends.
How many butterfly knots
does Al have left?
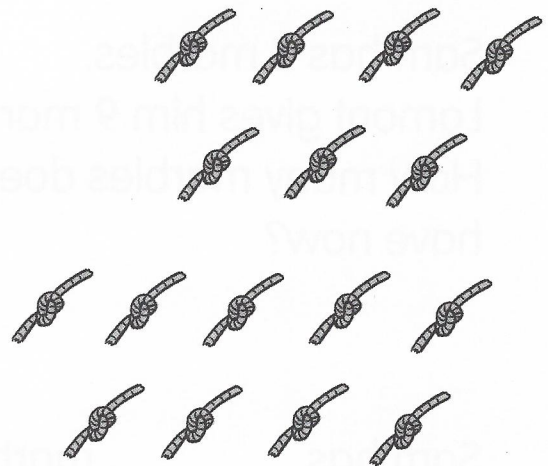
Al has _____ butterfly knots left.

CHAPTER 9 Length

PROBLEM SOLVING
Thinking Skills

Measure each line using paper clips. Then write the length.

The length of 1 paper clip is ⬭.

1a.

Line	Length 1 ⬭ = 1 unit
Line A _____	_____ units
Line B _____	_____ units
Line C _____	_____ units
Line D _____	_____ units

Read each sentence.
Check (✔) if the sentence is correct.

b.

Sentence	Check (✔) if correct
Line C is 1 paper clip longer than Line B.	
Line A is longer than Line C.	
Line B is longer than Line D.	
Line A is as long as Line D.	
Line B is the longest.	
The lengths of Line A, Line C, and Line D add up to 10 paper clips.	

Complete.

c. Draw a line that is one paper clip longer than Line B.

d. Draw a line that is two paper clips shorter than Line D.

2. Look at the picture.
Fill in the blanks.

Andy   Britney   Joel   Darlene
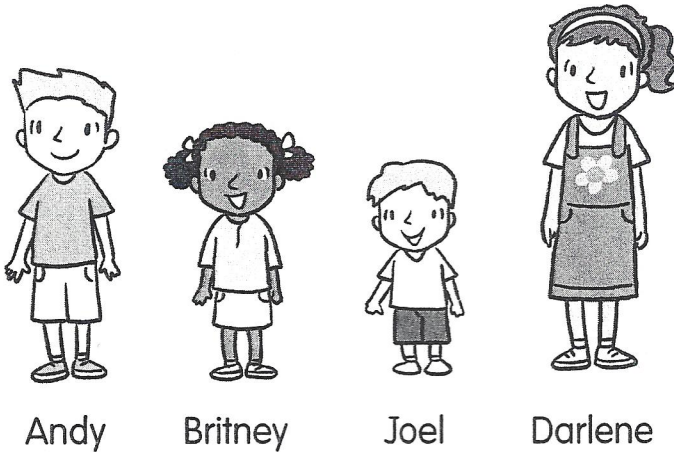
a. _____ is the next tallest after Darlene.

b. _____ is taller than Joel but shorter than Andy.

Complete. Write *shorter* or *taller*.

c. Darlene is _____ than Andy.

Andy is _____ than Joel.

So, Joel is _____ than Darlene.

Look at the picture.
Fill in the blanks.

3.
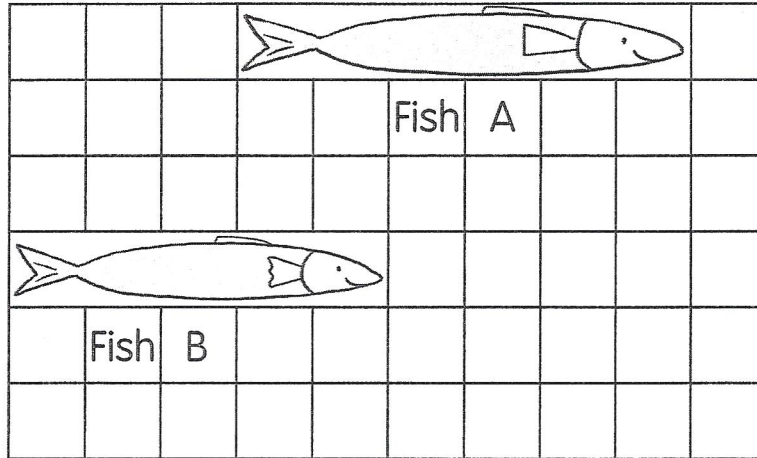
1 unit

a. Fish A is about _____ units long.

b. Fish A is about _____ unit(s) _____ than Fish B.

PROBLEM SOLVING
Strategies

Solve.
Show your work.

4.   The length of a pencil is 12 units.
        The length of a crayon is shown.

←→
1 unit

If the pencil and the crayon are put together end to end,
what is the total length?

The total length is about _____ units.

5.   Five erasers are placed in a row.
Each eraser is 3 units long.
There is 1 unit between every two erasers.
What is the total length from the first eraser to the last?

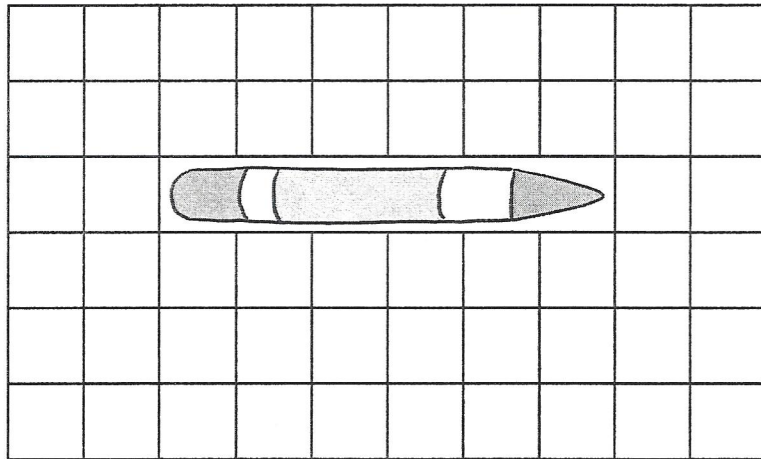The total length is _____ units.

6.   Eleanor draws nine dots in a row.
The dots are 2 units apart from one another.
How far is the last dot from the first?

● ● ● ● ● ● ● ● ●
←→
2 units
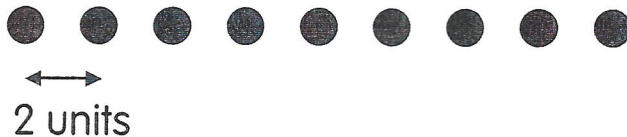
The last dot is _____ units from the first dot.

7.   There are 6 marks along a line.
The marks are 3 units apart from one another.
How far is the 2nd mark from the 5th mark?

1st

3 units

The 2nd mark is _____ units from the 5th mark.

PROBLEM SOLVING
Exploration

Solve.
Show your work.

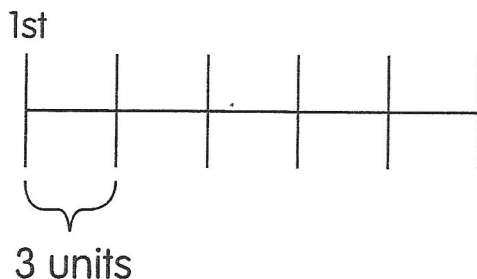**8.** An ant crawls from A to B along the lines.
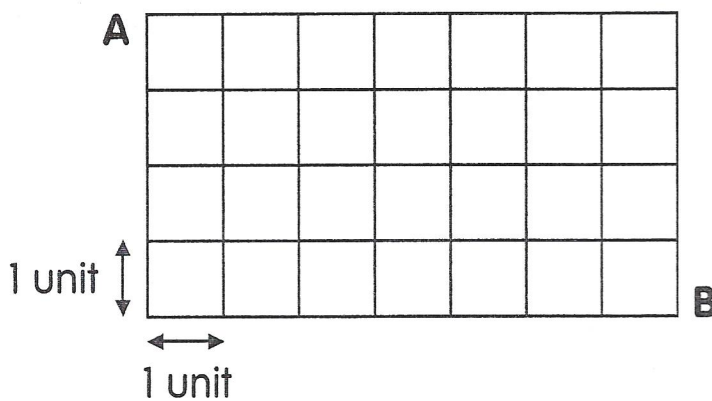
a. Trace the shortest path from A to B.

b. The shortest path from A to B is _____ units long.

c. Draw three paths that are 6 units longer than the shortest path.

Journal Writing

Find the mistake.
Then write the correct sentence.
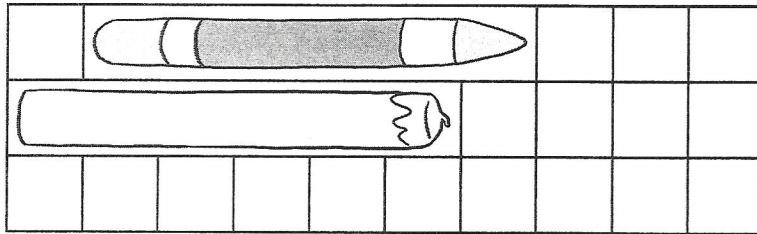
9. Jackie says that the crayon is longer than the candle.

_____

_____

10. The length of a pen is about 9 paper clips.
The length of a pencil is about 2 sticks.
The pen is as long as the pencil.

stick

_____

_____

11. Look at the picture.
Explain how you know that the pencil is shorter than the ribbon.
Use **units** in your answer.

_____

_____

_____

_____

Chapter 5

SHAPES AND PATTERNS

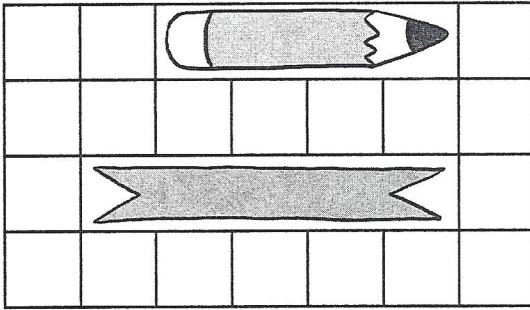*Shapes and Patterns (Enrichment 1A pages 33-41)* .... ☐

Chapter 6

ORDINAL NUMBERS AND POSITION

Ordinal Numbers and Position (Enrichment 1A pages 42-50) .... ☐

Chapter 7

NUMBERS TO 20

Comparing Numbers (Practice 3) .... ☐

Chapter 8

ADDITION AND SUBTRACTION FACTS TO 20

Real-World Problems: Addition and Subtraction Facts (Practice 5) .... ☐

Chapter 9

LENGTH

Length (Enrichment 1A pages 66 – 74) .... ☐