

Name \_\_\_\_\_ Date \_\_\_\_\_

(4a)

The chart shows the prices of four toys back in 1897.

TOYS OF LONG AGO	
TOY	PRICE
Catcher's Mitt	20¢
Rocking Horse	78¢
Ice Skates	62¢
Baseball	72¢

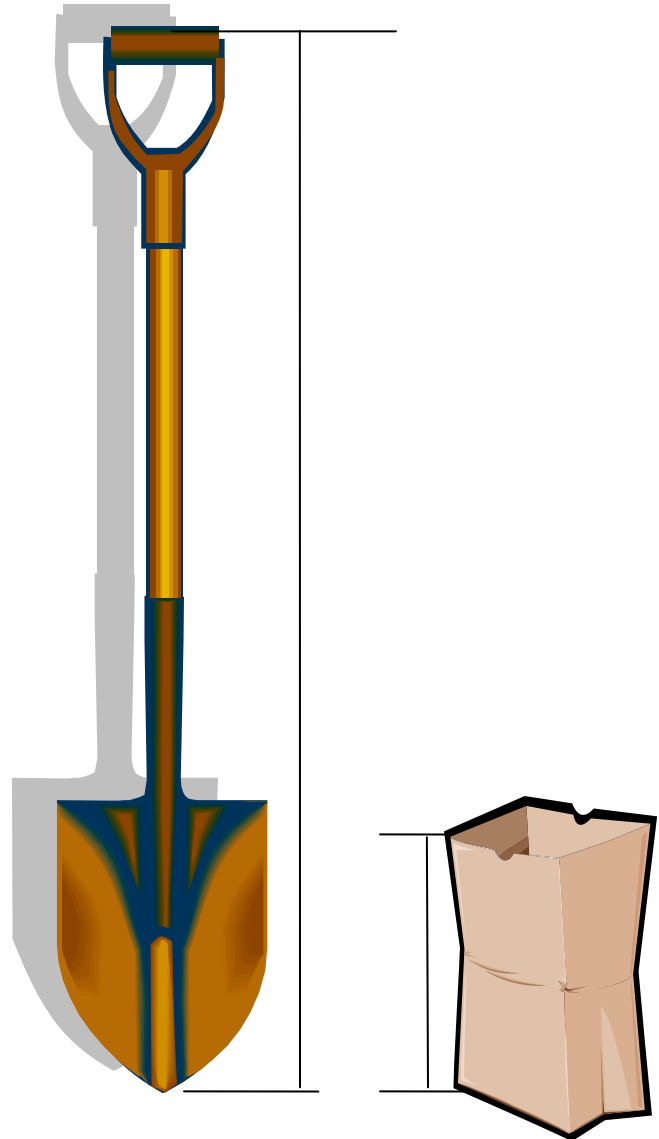
1. Which toy cost **more** than 75¢?

- Catcher's Mitt
- Rocking Horse
- Ice Skates
- Baseball

2. Which toy cost **less** than 61¢?

- Catcher's Mitt
- Rocking Horse
- Ice Skates
- Baseball

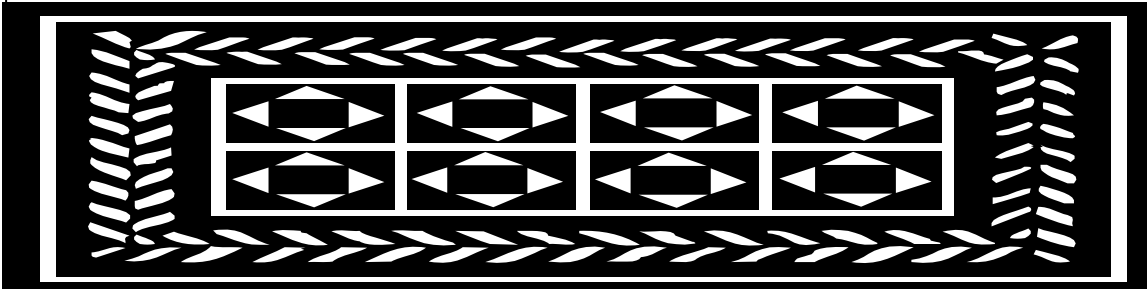
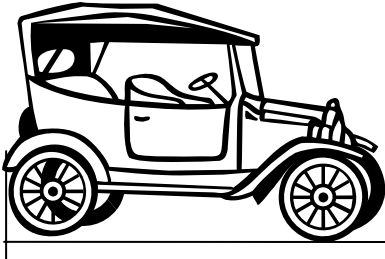
(15A)



3. **About** how many bags would be as tall as the stick?

- Less than 3
- Between 3 and 6
- Between 6 and 9
- More than 9

(15A)



4. **About** how many toy cars will fit across the rug?

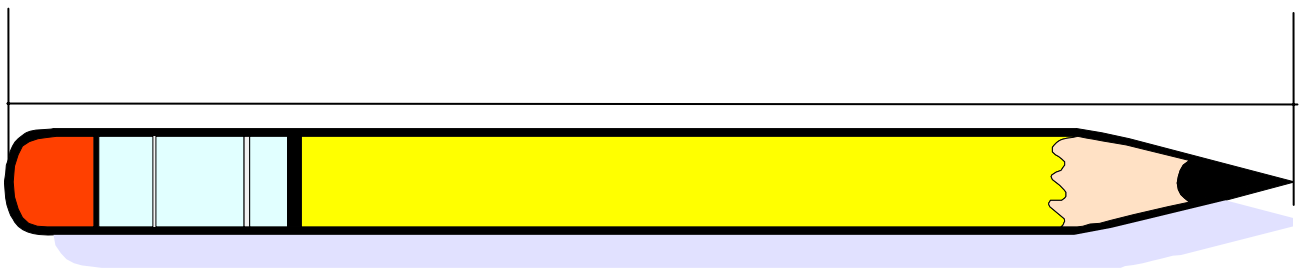
- 3
- 5
- 8
- 10

(16A)

Measure the length of the pencil along the line over the pencil.

Use Unifix cubes or Linker cubes.

Be sure to link the cubes together when you measure.



5. How many cubes long is the pencil. Write the number: \_\_\_\_\_

(16A)

Measure the height of the window. Use the line at the side of the window.  
Use Unifix cubes or Linker cubes. Link the cubes together



6. How tall is the window? Write the number of cubes: \_\_\_\_\_

(16B)

7. Which unit would be **best** to measure the length of a pencil?

- inches
- feet

(16B)

8. Which unit would be **best** to measure how tall a door is?

- centimeters
- meters

(16B)

9. Which of these would be **about** 2 meters tall?

- clothespin
- toothbrush
- pencil
- door

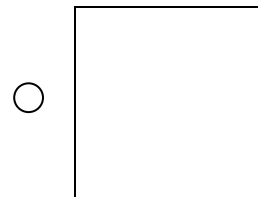
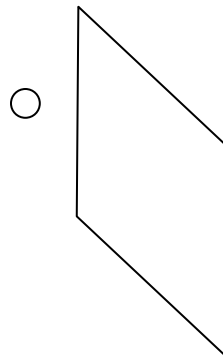
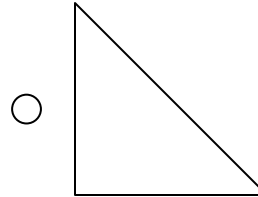
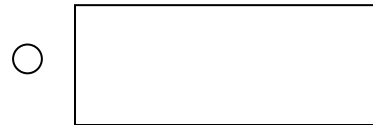
(16B)

10. Which of these would be **about** 3 inches long?

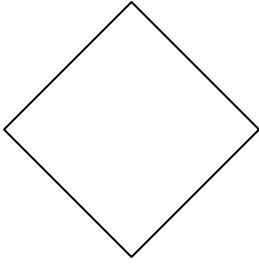
- a toothbrush
- a truck
- a crayon
- a soccer field

(17B)

11. Which shape is a rectangle?



(17A)



12. What is the name of the shape?

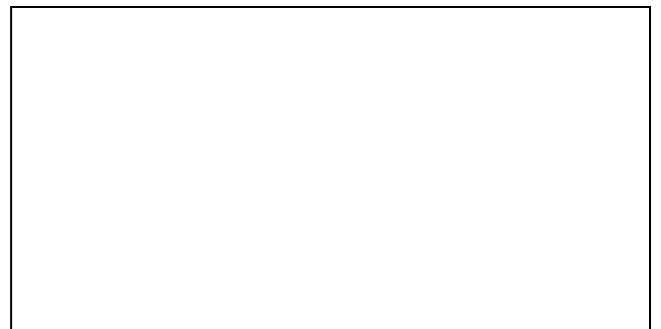
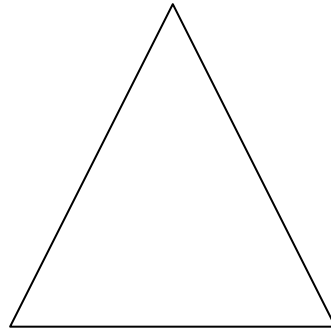
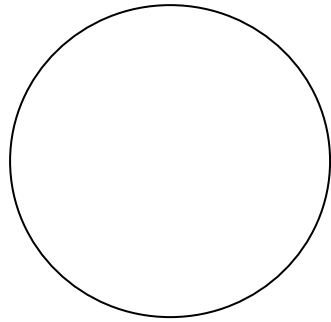
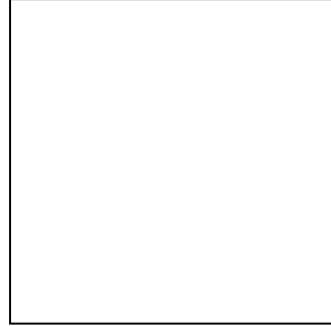
- rectangle
- square
- circle
- triangle

(17B)

13. Draw a triangle.

(17B)

14. **Draw a circle** inside the square.

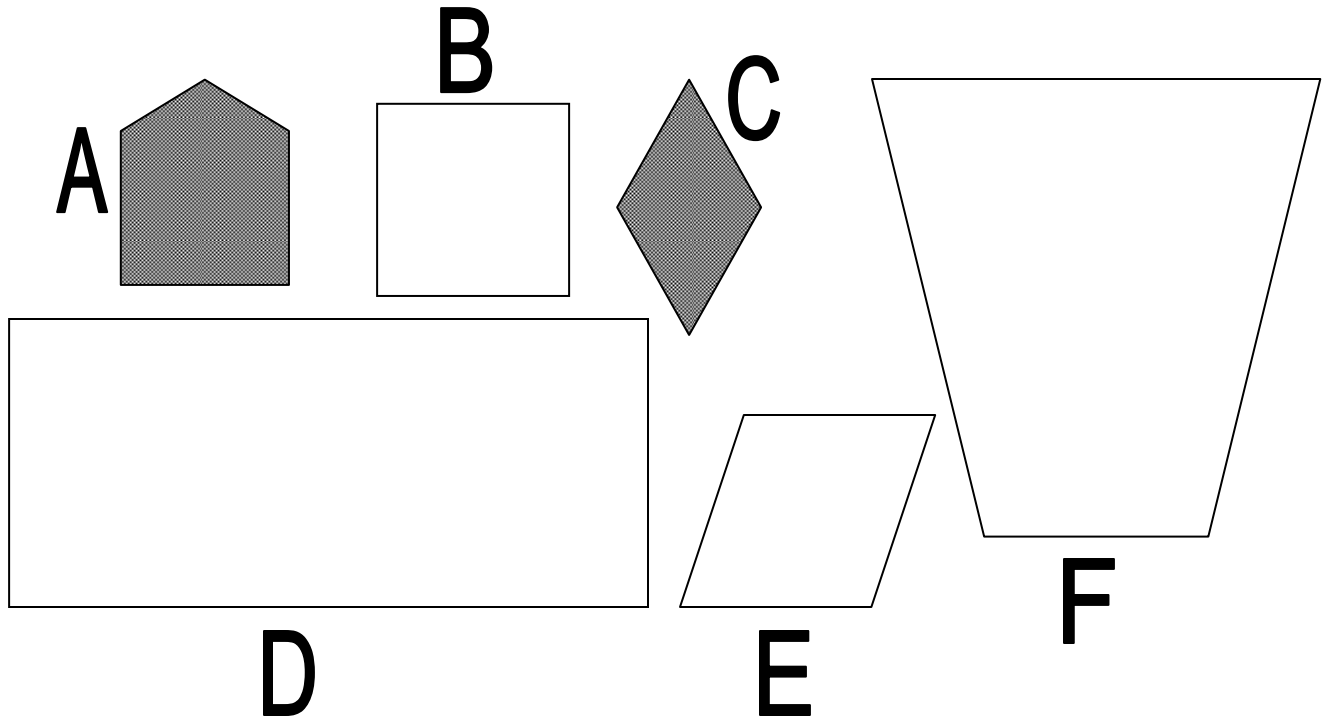


(24B)

Name \_\_\_\_\_ Date \_\_\_\_\_

Sort all 6 of these shapes into 2 groups so that the shapes in each group have something in common.

Show how you grouped the figures by writing the **letter** (A, B, C, D, E, or F) of each figure on the chart.



Group 1	Group 2

Explain why you grouped the shapes the way you did.

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(25A)

Debbie wants to put all her toy animals into 3 boxes. These are her toys:



9 RABBITS



6 TIGERS



5 DOGS

- ◆ She wants at least 2 of each animal in each box.
  - She can put 2 or more rabbits in a box.
  - She can put 2 or more tigers in a box.
  - She can put 2 or more dogs in a box.
  
- ◆ Only one box may have all 3 types of animals.
- ◆ It is alright if none of the boxes have all 3 types of animals.
  
- ◆ Each box must have at least 2 types of animals
  - A box could have rabbits and tigers.
  - A box could have rabbits and dogs
  - A box could have tigers and dog.
  
- ◆ No box may have only one type of animal.
  - She cannot have a box with only bunnies, or only tigers, or only dogs.
  
- ◆ Write the first letter of the animals inside the boxes
  - R = rabbits
  - T = tigers
  - D = dogs

Use the next page to show your answers.



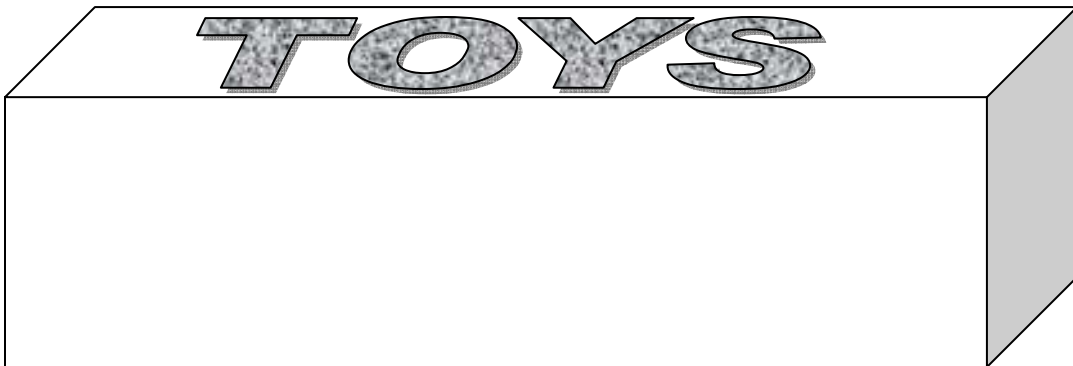
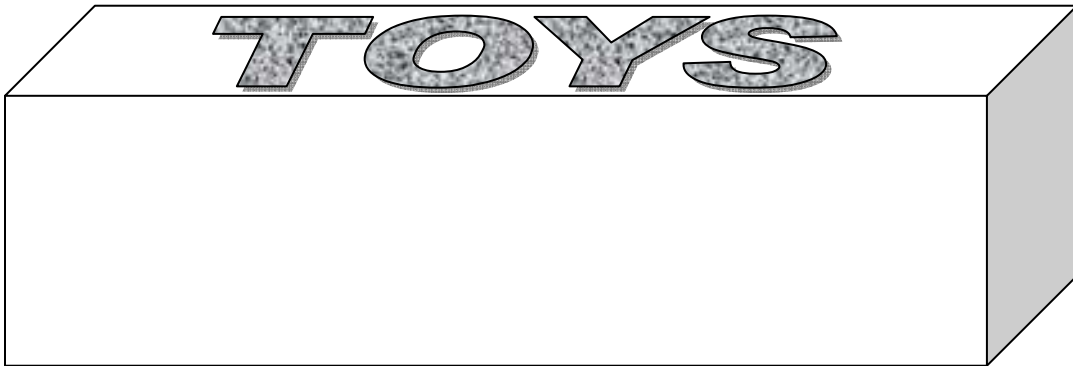
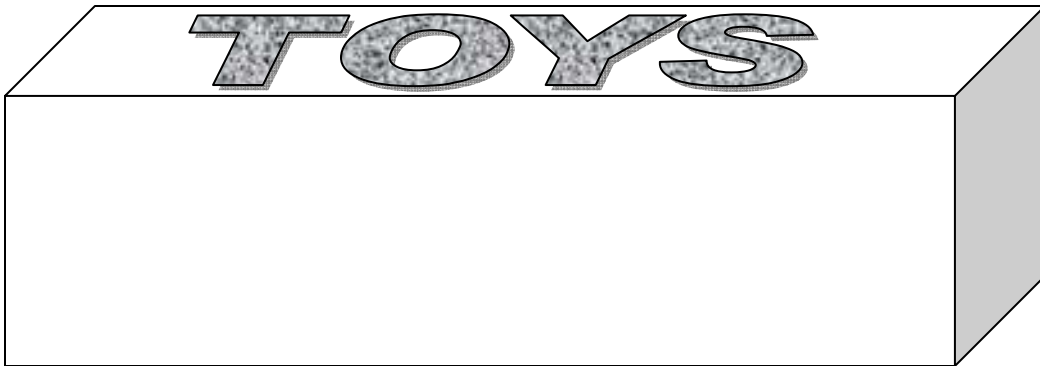
9 RABBITS



6 TIGERS



5 DOGS



Topic 3: Measurement and Geometry (15 Lessons)

Sept. 20, 2005

- ◆ 4A. Identify a number larger or smaller than a given set of numbers  $< 100$ . (Magnitude of Numbers)
- ◆ 15A. Estimate lengths using nonstandard units.
- ◆ 16A. Measure lengths using nonstandard units.
- ◆ 16B. Identify appropriate customary or metric units of measure for a given situation (inches, feet, centimeters, meters – Length).
- ◆ 17A. Identify simple geometric figures (circle, square, triangle, rectangle).
- ◆ 17B. Draw simple geometric figures (circle, square, triangle, rectangle).
- ◆ 24B. Sort objects into two groups by a common attribute.
- ◆ 25A. Solve extended statistical problems.

## ANSWERS

(4a)

The chart shows the prices of four toys back in 1897.

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TOY	PRICE
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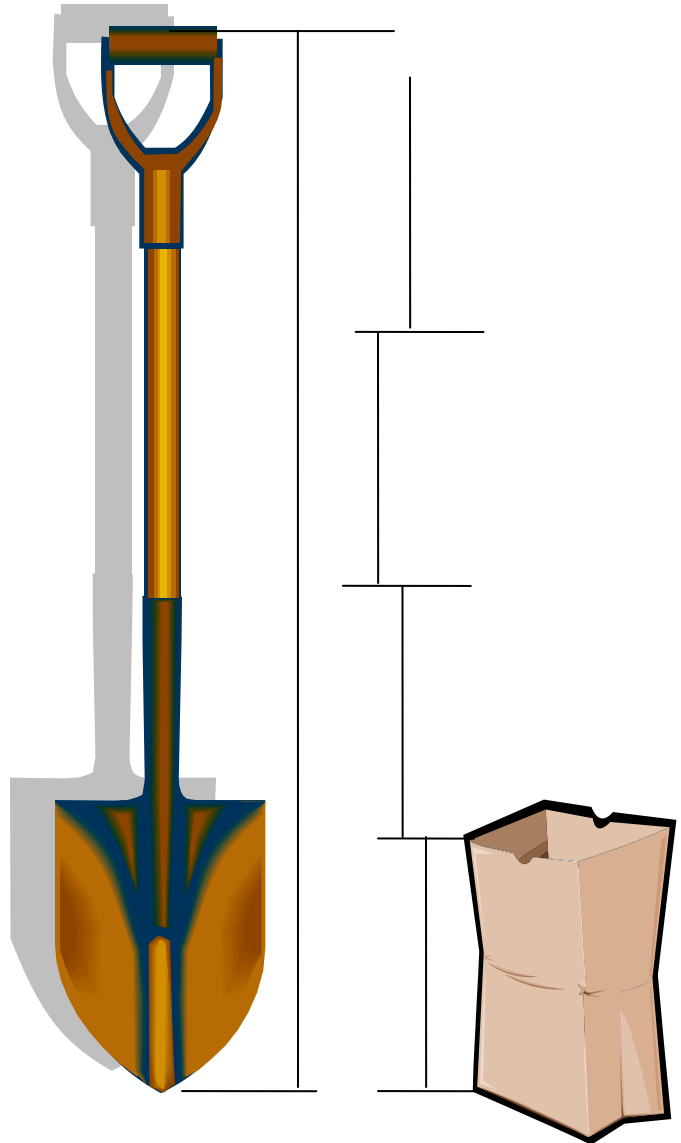
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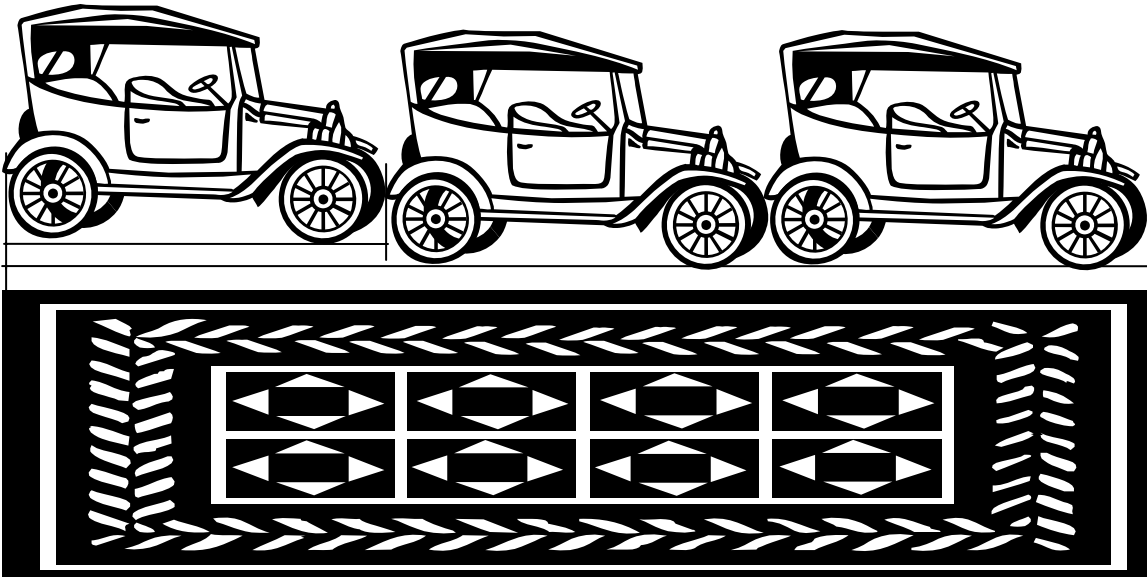
(15A)



3. **About** how many bags would be as tall as the stick?

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(15A)



4. **About** how many toy cars will fit across the rug?

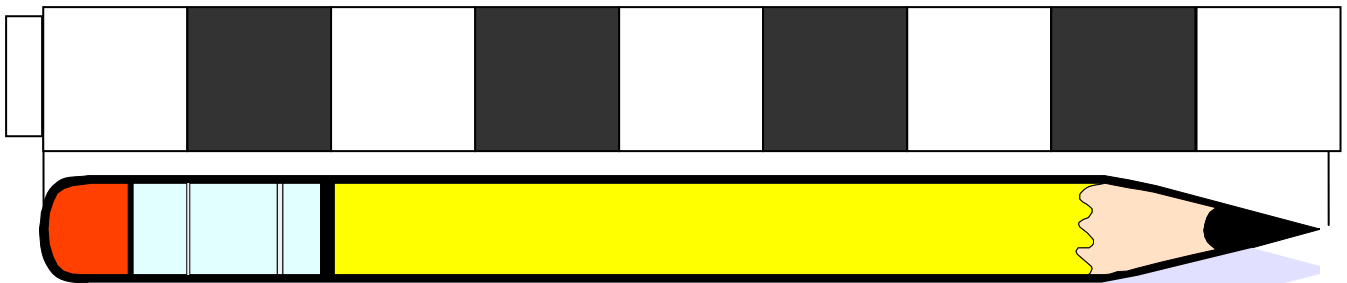
- 3 \*\*\*
- 5
- 8
- 10

(16A)

Measure the length of the pencil along the line over the pencil.

Use Unifix cubes or Linker cubes.

Be sure to link the cubes together when you measure.

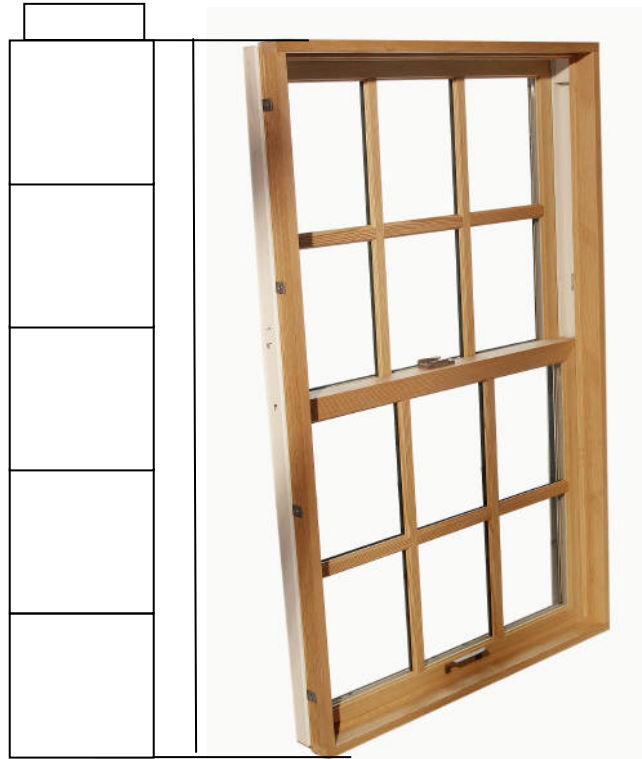


5. How many cubes long is the pencil. Write the number: \_\_\_\_\_

ANSWER: 8 OR 9 (depends on whether the student counts the connector at the beginning of the train of cubes.)

(16A)

Measure the height of the window. Use the line at the side of the window.  
Use Unifix cubes or Linker cubes. Link the cubes together



6. How tall is the window? Write the number of cubes:   5

(16B)

7. Which unit would be **best** to measure the length of a pencil?

- inches \*\*\*
- feet

(16B)

8. Which unit would be **best** to measure how tall a door is?

- centimeters
- meters

(16B)

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- toothbrush
- pencil
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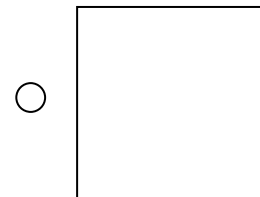
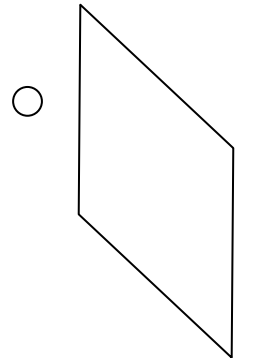
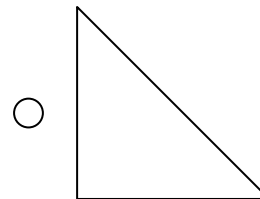
(16B)

10. Which of these would be **about** 3 inches long?

- a toothbrush
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- a crayon \*\*\*
- a soccer field

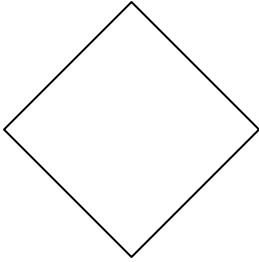
(17B)

11. Which shape is a rectangle?



**Please note: The actual CMT always has 4 multiple choices. It seemed more appropriate for second graders earlier in the year to deal with only 2 multiple choices for problems 7 and 8.**

(17A)

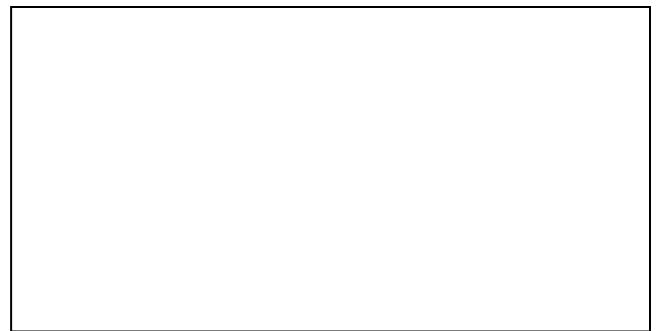
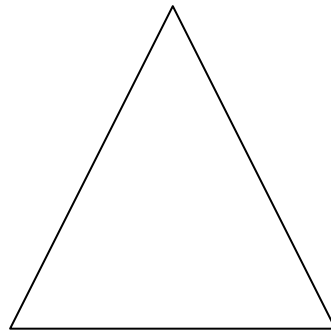
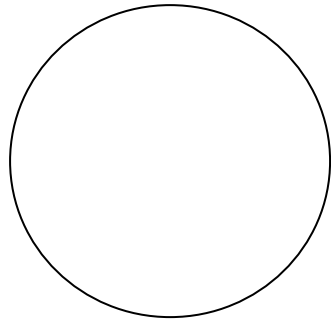
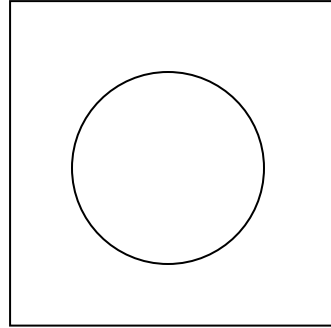


12. What is the name of the shape?

- rectangle
- square \*\*\*
- circle
- triangle

(17B)

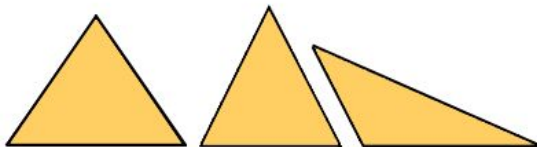
14. **Draw a circle** inside the square.



(17B)

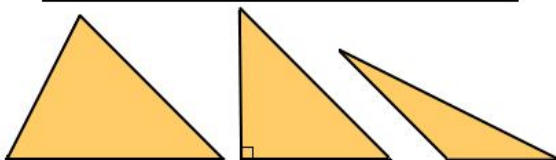
13. Draw a triangle.

**Classification According to Length of Sides**



**Equilateral    Isosceles    Scalene**

**Classification According to Size of Angle**



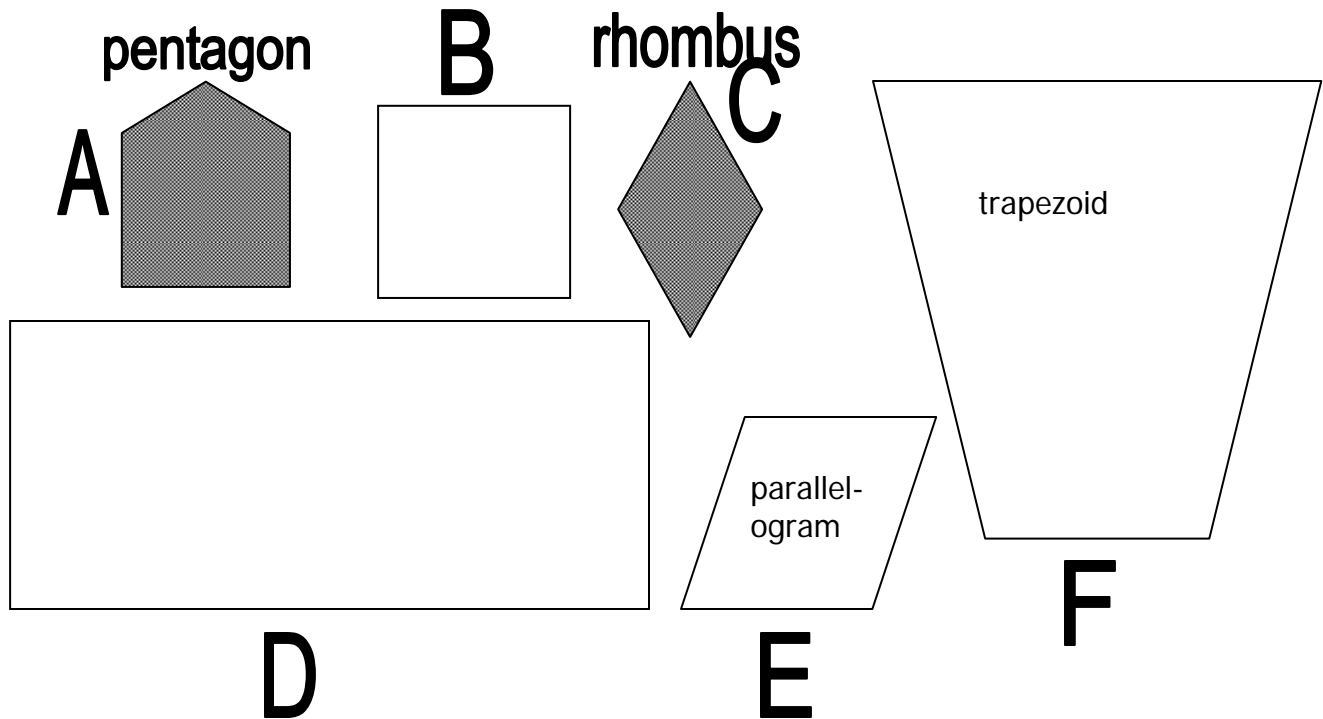
**Acute    Right    Obtuse**

(24B)

Name \_\_\_\_\_ Date \_\_\_\_\_

Sort all 6 of these shapes into 2 groups so that the shapes in each group have something in common.

Show how you grouped the figures by writing the **letter** (A, B, C, D, E, or F) of each figure on the chart.



Sort by size:

- ◆ DF (Large, huge, big) vs ABCE (small, tiny, little)
- ◆ large vs not large
- ◆ small vs not small

Sort by color

- ◆ Shaded (AC) vs Not Shaded (BDEF)
- ◆ Black vs White
- ◆ Black vs Not Black
- ◆ White vs Not White
- ◆ Shaded vs White

Sort by Attributes Associated with Shape

- ◆ 4 Sides (BCDEF) vs 5 Sides (A); 4 Sides vs Not 4 sides; 5 Sides vs Not 5 Sides; 4 Sides vs More than 4 Sides; 5 Sides vs Less than 5 Sides
- ◆ Pentagons (A) vs Quadrilaterals (BCDEF); Pentagons vs Not Pentagons; Quadrilaterals vs Not Quadrilaterals
- ◆ Shapes with Right Angles (ABD) vs Shapes with No Right Angles (CEF)
- ◆ Shapes with Parallel Sides (ABCDE) vs Shapes with No Parallel Sides (F)
- ◆ Trapezoid vs not Trapezoid; Pentagon vs Not Pentagon, etc.

(25A)

Debbie wants to put all her toy animals into 3 boxes. These are her toys:



9 RABBITS



6 TIGERS



5 DOGS

- ◆ She wants at least 2 of each animal in each box.
  - She can put 2 or more rabbits in a box.
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  - D = dogs

Use the next page to show your answers.



9 RABBITS



6 TIGERS



5 DOGS

Box 1: Rabbit Rabbit Rabbit Tiger Tiger

Box 2: Rabbit Rabbit Rabbit

Dog Dog Dog Dog Dog

Box 3: Rabbit Rabbit Rabbit Tiger Tiger Tiger Tiger

At least two of each animal  
At least two types of animals

Box 1: Rabbit Rabbit Rabbit

Tiger Tiger

Dog Dog

Box 2: Rabbit Rabbit

Dog Dog Dog

Box 3: Rabbit Rabbit Rabbit Rabbit Tiger Tiger Tiger Tiger

At least two of each animal  
At least two types of animals  
Only one box has all 3 types of animals

To make this problem harder, one more criterion is needed –

- ◆ perhaps the total number of animals could be limited
  - a minimum of so many animals in each box or
  - a maximum for each box.
- ◆ perhaps a rule saying something like tigers cannot be greater in number than dogs in any box